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RECESSION - RECOVERY WATCH...

A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions

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Summary

The leading indexes are moderately optimistic about 1986, pointing to faster growth in real GNP and a small decline in unemployment. Each of the three leading indexes tracked in this report has already signaled an end to the growth recession. Advances in the leaders have been widespread, not confined to a few industries or types of economic activity. One of the sustaining elements in the business cycle expansion, which is now entering its fourth year, is the substantial rise in profit margins and in the ratios of selling prices to unit labor costs. This development, together with the decline in interest rates, has helped to support the stock market as well. A survey of businessmen's expectations regarding prices, which has proved in the past to yield useful forecasts of inflation, suggests that inflation will continue to recede in 1986.

Leading Indexes Forecast More Growth in '86

Although economic forecasters in recent months have had rather mixed feelings on whether the economy will grow faster in 1986 than in 1985, the three leading indexes that we have been tracking are unanimous on this point. Their most recent growth rates, on a six-month smoothed basis, are well above where they were a year ago:

	Most Recent		Year Ago	
	Date	%	Date	%
Business Week leading index	Dec. 14, 1985	8.8	Dec. 15, 1984	4.8
BCD leading index	Nov., 1985	4.1	Nov., 1984	-0.3
Leading employment index	Nov., 1985	4.8	Nov., 1984	3.8

According to these indexes the outlook for 1986 is definitely brighter than it was for 1985.

For many years we have been translating growth rates in leading indexes into forecasts of broad measures of economic activity. In 1968, for example, the BCD leading index (as it was then constructed) was used to forecast the subsequent year-to-year percent changes in real GNP. Last year this method, using the same regression equation fitted to the data available in 1968, produced a forecast of 2.2% real growth for 1985. This has turned out to be somewhat below the actual rate as currently estimated, 2.4%, but much closer to the mark than the predictions of most economists last year. For 1986 this method is projecting 3.2%, about the same as the consensus. The Business Week index is more optimistic. It's growth rate as of November (7.7%) translates to a forecast of 4.4% growth in real GNP for 1986. Last year, the November figure produced a forecast of 3.1%. The leading employment index, according to a recently developed method of using it to forecast unemployment, is presently indicating a modest decline in unemployment. It would put the average unemployment rate for the six months from December 1985 through May 1986 at 6.8%, whereas the actual average for the preceding six months was 7.1%.

It should be noted, also, that the recent growth rates in the leading indexes are well above their long-run trend rate, which is 3.3% in each case. Growth recessions are defined as periods during which the growth in aggregate economic activity is less rapid than its long-run trend rate. An early sign of the end of a growth recession, therefore, is when the growth rates of the leading indexes rise significantly above their trend rate. That early signal has been delivered by each of the three indexes (Chart A).

Widespread Increases in the Leaders

Another favorable sign is that the upswing in the leading indicators is widespread, not confined to a few sectors. The boom in stock prices is a factor, but two of the fundamentals underlying the stock price rise, namely the strong recovery in profit margins and the decline in interest rates, are likely to have favorable repercussions elsewhere, notably on employment, capital investment and housing. The recovery in profit margins has been stronger than in any of the three long business cycle expansions with which we now make comparisons. The ratio of corporate profits after taxes (with inventory valuation and capital consumption adjustments) to corporate domestic income rose from 5 percent to 10.8 percent during the 33 months of the current recovery (IV Q'82 to III Q'85). The increase of 5.8 percentage points compares with a decline of 3.7 in the first 33 months of the 1949-52 recovery and rises of 2.7 and 3.4 in the 1961-64 and 1975-78 recoveries. Similarly, the ratio of selling prices to unit labor cost in nonfarm enterprises has risen 4.3% in the current recovery, compared with increases of 0.2, 3.5 and 2.5 in the 1949, 1961 and 1975 recoveries, respectively. See Charts 48 and 49.

CHART A.

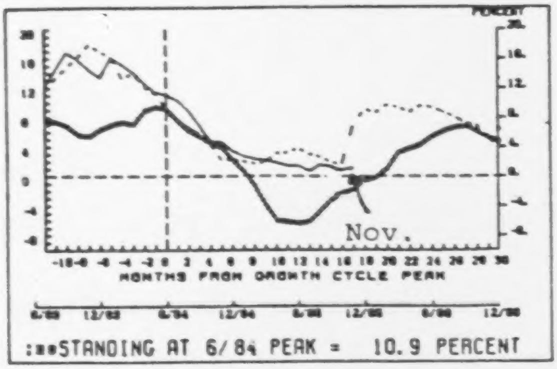
Current Slowdown Compared with Three Growth Recessions and Seven Real Recessions

——— Current slowdown, from June 1984

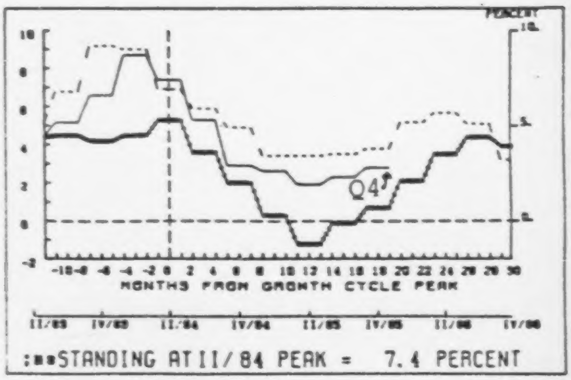
——— Average, three growth recessions (1951, 1962, 1966)

········· Average, seven real recessions (1948, 1953, 1957, 1960, 1969, 1973, 1980)

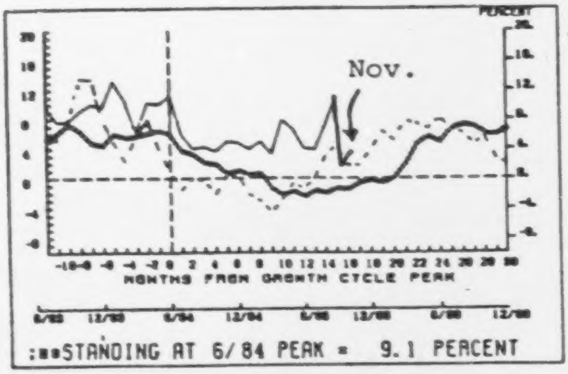
INDUSTRIAL PRODUCTION, GROWTH RATE



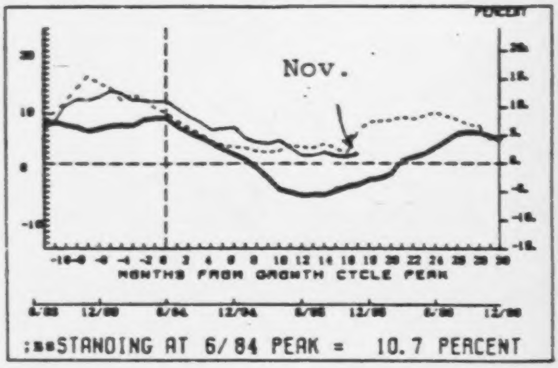
REAL GROSS NATIONAL PRODUCT, GROWTH RATE



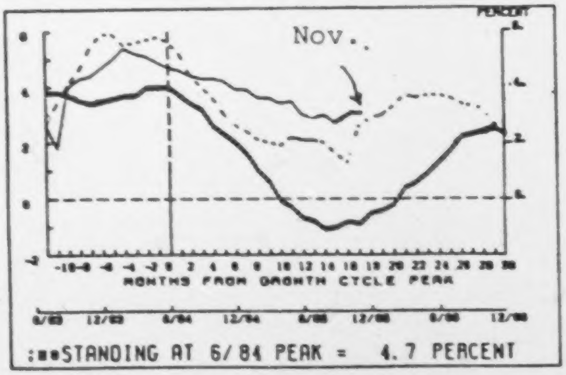
REAL RETAIL SALES, GROWTH RATE



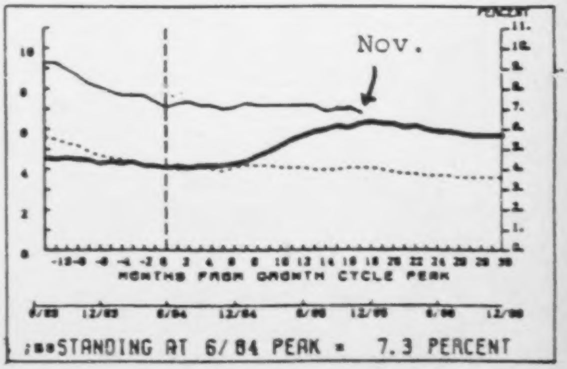
BCD COINCIDENT INDEX, GROWTH RATE



NONFARM EMPLOYMENT, GROWTH RATE



UNEMPLOYMENT RATE



Growth rates are six-month smoothed or two-quarter smoothed annual rates, based on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

CHART A., continued

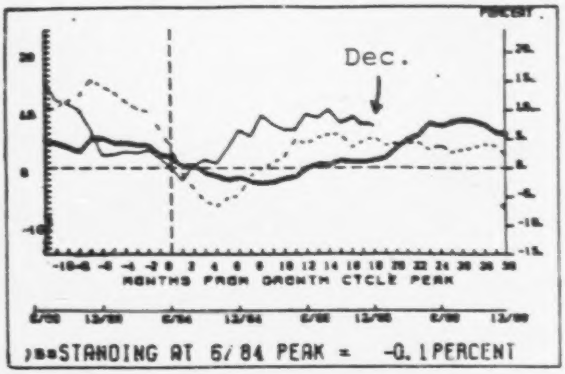
Current Slowdown Compared with Three Growth Recessions and Seven Real Recessions

——— Current slowdown, from June 1984

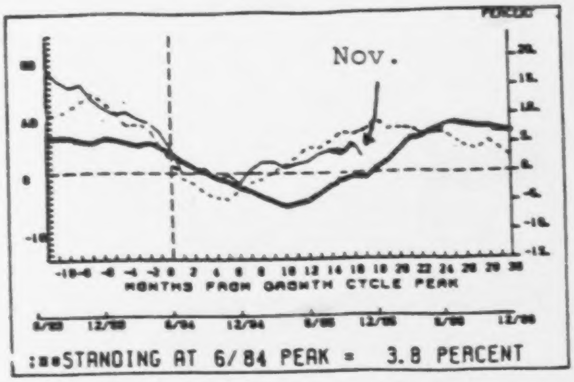
——— Average, three growth recessions (1951, 1962, 1966)

━━━ Average, seven real recessions (1948, 1953, 1957, 1960, 1969, 1973, 1980)

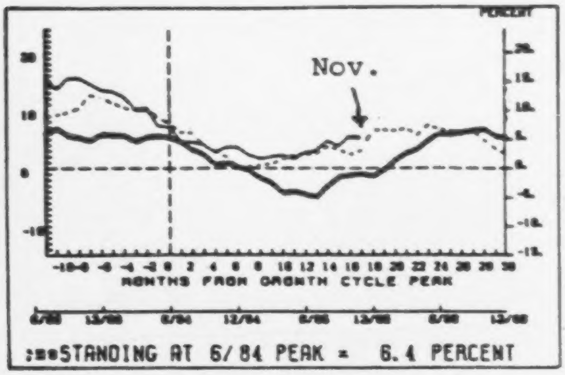
BUSINESS WEEK LEADING INDEX,
GROWTH RATE



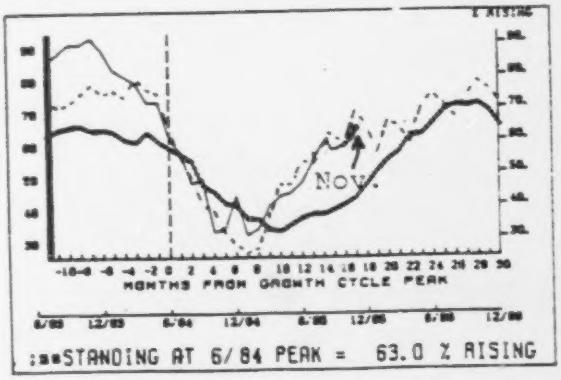
BCD LEADING INDEX,
GROWTH RATE



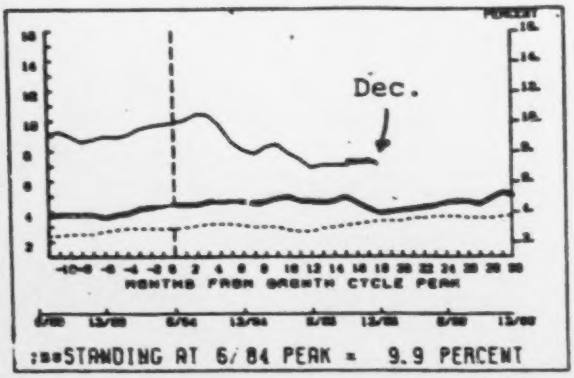
LEADING EMPLOYMENT INDEX,
GROWTH RATE (CIBCR)



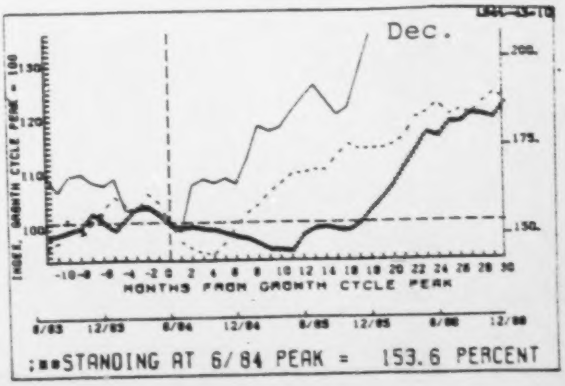
DIFFUSION INDEX
OF LEADING INDICATORS



TREASURY BILL RATE
(SIX MONTH)



COMMON STOCK PRICE INDEX
(S&P 500)



Growth rates are six-month smoothed or two-quarter smoothed annual rates, based on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

The diffusion index of 164 leading indicators, introduced in the October Recession-Recovery Watch, has continued to show widespread gains. The October percent rising was 60 and the preliminary November reading, 66. A year ago these figures were 32 and 33%, respectively. The index covers a wide variety of leading indicators: the average workweek in 20 industries, initial claims for unemployment insurance in 51 areas, new orders in 34 industries, 13 spot commodity prices, and stock prices in 46 industries.

New Results with an Old Inflation Indicator

The Dun and Bradstreet quarterly survey of businessmen's anticipations of selling price changes has been conducted since 1950. Together with questions on sales, employment, profits, orders and inventories, it solicits the views of about 600 manufacturers, 400 wholesalers and 400 retailers. The anticipations refer to the quarter ahead compared to the same quarter a year ago, and the percentage reporting that prices will be higher, about the same, or lower is recorded. Recently we tested how well the survey taken at the end of the year anticipated the rate of inflation for the entire year ahead, not just the first quarter. The answer: remarkably well. In fact, more often than not the businessmen's responses provided a better forecast of inflation than various groups of economists' have been able to achieve at the same date.

The details of this analysis have been spelled out in a report available from the Center. Here we shall give only a sample of the results for recent years, pertaining to the year-over-year change in the consumer price index (Table A). The percent expecting their selling prices to be higher in the first quarter than a year ago is translated into a forecast of the year-to-year percent change in the CPI by means of a simple equation fitted to past data. The relationship accounted for 83% of the variance in the inflation rate during the 34 years, 1951-84. Whether it will do as well in the future remains to be seen. For 1986, the survey suggests that inflation will continue to decline, with the CPI only 2.6% above its 1985 level. Most forecasters have the figure closer to 4%, which is not far from where it now is. But that may reflect the tendency, demonstrated in our report, for forecasters to be heavily influenced by what the recent inflation rate has been. The businessmens' survey shows much less of this influence, one result being that it picks up turning points in inflation more promptly. Right now, it does not see an upturn.

TABLE A. INFLATION FORECASTS

	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86
Dun & Bradstreet End-of-year Survey, All Firms, Percent Expecting High Prices[1]	81	67	72	68	63
Year-over-year Inflation Rate, CPI					
Businessmens' Forecast, based on D&B Survey[2]	6.4	3.5	4.5	3.7	2.6
Economists' Forecast, Livingston Survey[3]	8.0	5.3	5.3	4.8	3.8
Actual Rate	6.1	3.2	4.3	3.5[4]	n.a.

[1] Average percent rising for manufacturers, wholesalers and retailers, including half those expecting no change.

[2] Using simple regression fitted to annual data, 1951-84.

[3] Average forecast made in December for the year ahead by economists surveyed by Joseph Livingston for the Philadelphia Inquirer. Data provided by Federal Reserve Bank of Philadelphia.

[4] Based on first eleven months.

Employment and Unemployment both at Record Highs

Among the six business cycle recoveries since 1949 that lasted at least three years, the present recovery is unique in producing both the highest percentage employed and the highest percentage unemployed. Table B shows what percentage of the working-age population had jobs in the 36th month of each recovery, and what percentage did not. There is a marked upward trend in the percentage with civilian jobs, a clear decline in the percentage in the armed forces, and a substantial rise in the total percentage employed. At 60.7%, the November 1985 figure is higher than in any previous month on record except for March and October 1985, when it was also 60.7. On the other hand, the percentage of the population that is seeking jobs -- the unemployment rate -- also is higher than in any previous recovery. This percentage, too, has risen fairly steadily over the years from one recovery to the next.

As a result, those who focus their attention solely on the unemployment rate are led to say the economy has grown steadily weaker, less able after each recession to absorb the unemployed. Those who look to employment as the measure of strength, on the other hand, see recoveries getting ever stronger, creating more and more jobs. What makes both these views possible is that a much larger fraction of the population is both working and seeking work, rising from 60 percent in 1952 to 65 percent in 1985. The entry of women into the labor force has been the principal factor behind this. Moreover, since new entrants into the labor market are initially unemployed, the large number of new entrants has tended to raise the unemployment rate. But this is by no means the whole story, and the main point of our table is to show that both the employment and the unemployment figures should be considered in appraising the strength of the labor market.

TABLE B. DISTRIBUTION OF THE WORKING AGE POPULATION IN THE THIRTY-SIXTH MONTH OF SIX RECOVERY PERIODS

		Percentage Distribution of the Population Sixteen and Older in the 36th Month							Unemp. Rate (% of Total Labor Force)
Business Cycle Recoveries, 1st 36 mos.	Population 16 & Older (thous.)	Civilian Employed	Armed Forces	Total Employed	Unemployed	Total Labor Force	Not in Labor Force	Total	
Nov. 82-85	180,642	59.7	0.9	60.7	4.5	65.2	34.8	100.0	6.9
Mar. 75-78	163,161	58.2	1.3	59.5	3.8	63.3	36.7	100.0	6.1
Nov. 70-73	150,502	57.3	1.5	58.8	2.9	61.7	38.3	100.0	4.7
Feb. 61-64	126,439	54.4	2.2	56.6	3.1	59.6	40.4	100.0	5.2
May 54-57	114,851	55.7	2.5	58.2	2.4	60.5	39.5	100.0	3.9
Oct. 49-52	109,161	55.1	3.3	58.4	1.7	60.0	40.0	100.0	2.8

Note: Recoveries beginning July 1980 and April 1958, which lasted 12 and 34 months, are omitted. Employment and unemployment data are adjusted for seasonal variations.

Source: Bureau of Labor Statistics

CHANGES IN THIS ISSUE

New layoff rate in leading employment index

The leading employment index has been revised back to 1948 to include an improved measure of the layoff rate, developed by the Center from figures reported by the Bureau of Labor Statistics. From 1969 to date the number of persons on layoff who have been unemployed less than five weeks is taken as a percentage of total civilian employment. Both figures are from the household survey. This rate reflects recent layoff actions, whereas the rate we previously used included all unemployed who had been laid off no matter when the layoff occurred. The new measure, as expected, has a better record as a leading indicator. It is similar conceptually and in behavior to the layoff rate in manufacturing industries, which the BLS discontinued in 1981, but has the advantage of broader coverage. We include the manufacturing series in the leading index prior to 1969 and use the new series thereafter. The new layoff rate series is shown in Chart 32.

Revised GNP figures

The GNP statistics are now reported by the Commerce Department in 1982 dollars instead of 1972 dollars, and other major revisions have been made. Since all the revised historical data were not available for this issue of Recession-Recovery Watch, we have used the revised data back to 1973 and adjusted the earlier data to the new 1973 levels.

NOTICE TO RECESSION-RECOVERY WATCH SUBSCRIBERS

The Center announces the release in mid-January of a *1986 Supplement* to this publication. This is a comprehensive set of tables for all 63 indicators reported here. Each table covers every month of each of the three long expansions since 1948, starting 11 months before the trough and ending *four* years after the trough. See the "Guide to Recession-Recovery Watch Tables" for further details.

To order the 100 page 1986 Supplement, use the order form on the back cover.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover sixty-three indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, all previous expansions since 1948 (or whenever after 1948 the indicator begins), and the average of three long expansions. The three long expansions are: 1949-53. 45 months; 1961-69, 106 months; 1975-80, 58 months. The expansions that are excluded from the averages covered the following periods: 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, September 1985, which is 34 months after the November 1982 business cycle trough, all the entries for that indicator will be for 34 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

The table pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending four years after the trough. The average recovery is also shown for each month of the five-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

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TABLE 1

RECESSION/RECOVERY STATUS UP TO 36 MONTHS AFTER THE BUSINESS CYCLE TROUGH

ACTUAL LEVELS

	Months After Business Cycle Trough	Expansions Starting							Average 1949 -75 (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
		OCT 1949	MAY 1954*	APR 1958*	FEB 1961	NOV 1970*	MAR 1975	JULY 1980*			
I. COMPOSITE INDEXES											
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	36	5.7	-2.1	10.9	3.6	-3.8	1.7	14.9	3.7	8.1	11/85
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	36	10.7	-0.6	3.1	4.7	2.7	5.7	14.2	7.0	5.4	11/85
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	36	7.0	1.0	-6.5	5.6	6.7	9.9	9.6	7.5	4.9	11/85
9. LEADING INDEX, GROWTH RATE	35	11.5	-3.6	4.2	6.0	-1.7	3.9	19.5	7.1	4.3	10/85
10. COINCIDENT INDEX, GROWTH RATE	35	11.1	1.1	-5.0	4.9	4.9	5.6	7.0	7.2	2.6	10/85
12. RATIO, COINCIDENT TO LAGGING INDEX	36	120.9	101.2	90.0	95.8	115.1	124.7	128.3	113.8	123.6	11/85
16. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	34			5.2	6.7	5.6	3.1	7.3	4.9	4.4	9/85
II. OUTPUT, INCOME AND SALES											
16. REAL GNP GROWTH RATE	36	5.5	2.0	3.0	6.2	2.7	3.4	5.2	5.0	2.8	IV/85
III. EMPLOYMENT AND UNEMPLOYMENT											
22. EMPLOYMENT TO POPULATION RATIO	36	57.9	57.8	55.9	56.3	58.7	59.3	58.4	57.8	60.7	11/85
27. EMPLOYMENT DIFFUSION INDEX, 186 IND.	36	85.0	38.3	24.2	65.6	70.2	79.8	67.8	76.8	50.0	11/85
28. UNEMPLOYMENT RATE: TOTAL	36	2.9	3.9	6.8	5.3	4.8	6.2	9.3	4.8	6.9	11/85
29. UNEMPLOYMENT RATE: INSURED	36	2.5	3.3	5.9	3.9	2.7	3.6	3.7	3.3	2.8	11/85
31. SHORT-DURATION UNEMPLOYMENT RATE	36	2.5	3.2	4.4	3.9	3.8	4.7	5.5	3.7	5.0	11/85
32. LAYOFF RATE	35	0.2	0.4	0.6	0.4	0.3	0.4	0.7	0.3	0.5	10/85
33. PART-TIME EMPLOYMENT RATIO	36			1.8	2.8	4.4	3.6	2.1	3.2	2.5	11/85
IV. INVESTMENT COMMITMENTS AND INVENTORIES											
40. INVENTORY/SALES RATIO, TIMES 10	34	16.1	15.1	15.9	14.9	15.6	16.5	16.0	15.8	15.5	9/85
41. CH IN INVENT ON HAND & ON ORDER, BIL 72$	34	10.6	-2.8	-12.1	6.6	19.7	16.5	-2.1	11.3	-1.1	9/85
V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
42. OUTPUT PER HOUR, GROWTH RATE	33	1.1	1.8	0.9	2.8	0.2	1.6	5.1	1.8	0.8	III/85
43. UNIT LABOR COSTS, GROWTH RATE	33	3.5	4.1	1.8	1.2	7.4	6.1	-0.2	3.6	3.1	III/85
44. HOURLY COMPENSATION, GROWTH RATE	33	3.9	6.5	3.2	4.1	7.5	7.8	4.8	5.3	3.9	III/85
45. REAL HOURLY COMPENSATION, GROWTH RATE	33	2.3	2.9	1.5	2.5	0.0	1.3	1.8	2.0	0.6	III/85
46. SELLING PRICE INDEX, GROWTH RATE	33	1.1	4.8	0.3	1.2	4.5	5.7	2.9	2.7	3.0	III/85
47. GROWTH IN PRICES MINUS GROWTH IN COSTS	33	-2.4	0.7	-1.5	0.0	-2.9	-0.4	3.1	-0.9	-0.1	III/85
48. CORPORATE PROFIT MARGIN	33	8.9	9.3	8.6	11.3	6.6	8.2	7.5	9.5	10.8	III/85
49. PRICE/LABOR COST RATIO	33	101.2	100.0	97.7	101.1	97.6	99.6	97.9	100.6	99.7	III/85
53. CONSUMER PRICE INDEX, GROWTH RATE	35	1.6	3.7	1.0	1.8	6.8	6.3	2.7	3.2	3.1	10/85
55. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	36	-20.8	-7.0	6.2	1.4	47.4	5.3	20.7	-4.7	-8.4	11/85
VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
56. BUSINESS & CONSUMER DEBT, GROWTH RATE	35	14.3	9.8	7.4	13.5	15.3	15.7	-1.0	14.5	6.6	10/85
57. FEDERAL DEBT, GROWTH RATE	35	1.3	-0.6	-0.3	1.4	1.9	11.6	26.6	4.8	14.0	10/85
58. TOTAL DEBT, GROWTH RATE	35	5.6	4.2	3.8	6.5	11.7	14.6	6.5	9.6	10.3	10/85
59. MONEY SUPPLY (M1), GROWTH RATE	36	4.3	0.8	2.0	3.5	5.2	7.3	12.8	5.0	11.5	11/85
60. MONEY SUPPLY (M2), GROWTH RATE	36	4.8	3.2	6.9	7.6	6.3	8.2	12.3	6.9	7.6	11/85
61. TREASURY BILL RATE (3-MONTH)	36	1.7	3.1	2.3	3.5	7.8	6.3	9.1	3.9	7.2	11/85
62. NEW CORPORATE BOND YIELD (AA)	36	3.2	4.4	4.6	4.4	7.9	8.7	12.5	5.4	11.3	11/85

* FIGURES NOT INCLUDED IN THE AVERAGES TO AVOID OVERLAP WITH CONTRACTIONS BEGINNING APRIL 1960, NOVEMBER 1973 AND JULY 1981.

TABLE 2

RECESSION/RECOVERY STATUS UP TO 36 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE TROUGH

		Months After Business Cycle Trough	Expansions Starting							Average 1949 -75 (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
			OCT 1949	MAY 1954*	APR 1958*	FEB 1961	NOV 1970*	MAR 1975	JULY 1980*			
I.	COMPOSITE INDEXES											
1.	BUSINESS WEEK LEADING INDEX (CIBCR)	36	21.2	9.1	14.4	21.2	24.5	23.8	13.4	22.0	25.2	11/85
2.	LEADING EMPLOYMENT INDEX (CIBCR)	36	28.8	14.9	16.8	20.1	18.6	23.0	14.5	23.9	22.6	11/85
3.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	36	36.2	18.7	9.9	17.3	21.3	28.0	9.5	27.2	28.3	11/85
4.	LEADING INDEX (BCD)	36	15.5	13.4	18.2	23.1	24.2	33.2	17.1	23.9	22.8	11/85
5.	COINCIDENT INDEX (BCD)	36	33.8	16.8	9.9	18.4	22.5	23.2	-0.2	25.2	21.4	11/85
11r-	LAGGING INDEX (BCD)	36	31.8	24.2	11.6	8.6	1.0	-4.5	-10.5	11.9	10.2	11/85
13.	EIGHT-COUNTRY LEADING INDEX (CIBCR)	34			25.8	9.7	22.3	15.8	6.0	12.7	19.8	9/85
II.	OUTPUT, INCOME AND SALES											
15.	REAL GNP	36	24.9	12.5	12.2	17.2	16.4	13.9	4.3	18.6	14.4	IV/85
17.	INDUSTRIAL PRODUCTION INDEX	36	38.3	21.0	17.2	26.0	25.0	24.5	4.2	29.6	24.4	11/85
18.	REAL PERSONAL INCOME	35	21.5	16.1	10.2	13.3	16.0	14.6	6.6	16.5	12.1	10/85
19.	REAL CONSUMER EXPENDITURES	35	9.3	12.8	11.1	13.1	14.0	15.6	9.5	12.7	15.6	10/85
20.	REAL RETAIL SALES	35	6.4	14.8	9.1	12.8	22.0	16.7	9.1	12.0	19.7	10/85
III.	EMPLOYMENT AND UNEMPLOYMENT											
21.	TOTAL EMPLOYMENT	36	6.3	6.2	4.1	4.6	9.2	10.9	2.5	7.3	8.8	11/85
-23.	NONFARM EMPLOYMENT	36	14.4	8.4	5.1	7.8	10.6	11.6	0.6	11.2	11.3	11/85
24.	NONFARM EMPLOYEE-HOURS	36	16.0	7.8	5.3	8.2	10.4	11.4	0.2	11.9	12.5	11/85
25.	EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES	36	20.1	7.0	1.6	6.2	10.4	11.2	-7.3	12.5	9.1	11/85
26.	EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	36	10.6	9.4	7.2	8.7	10.6	11.7	3.6	10.3	12.1	11/85
30.	INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	36	-50.0	-22.1	-10.3	-32.6	-20.7	-36.8	-28.1	-39.8	-37.9	11/85
34.	AVERAGE WORKWEEK, MANUFACURING	36	4.7	0.8	2.3	3.3	3.0	3.9	2.6	4.0	4.4	11/85
35.	OVERTIME HOURS, MANUFACTURING	36			26.9	38.1	46.2	45.8	20.0	42.0	47.8	11/85
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
36.	NEW PRIVATE HOUSING STARTS	36	-10.1	-18.9	1.3	46.7	1.0	110.1	36.5	48.9	20.6	11/85
37.	NEW PRIVATE HOUSING PERMITS	36	-15.3	-18.4	2.7	42.2	-14.5	119.6	43.8	48.8	30.9	11/85
38.	CONTRACTS & ORDERS, PLANT & EQUIPMENT	35	91.4	33.5	17.6	36.6	63.1	51.4	-0.3	59.8	31.2	10/85
39.	NEW CAPITAL APPROPRIATIONS, MFG.	36		51.7	23.9	66.8	86.5	24.2	-13.6	45.5	9.0	III/85
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
50.	BUSINESS FAILURES, LIABILITIES $100,000+	36	10.0	68.0	31.9	4.1	1.8	-29.7	163.9	-5.2	6.2	11/85
51.	LEADING INDEX OF INFLATION (CIBCR)	36	12.0	4.2	3.6	5.5	17.9	21.5	1.6	13.0	15.7	11/85
52.	CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	35	12.4	3.8	3.2	3.7	15.1	19.3	20.1	11.8	10.6	10/85
54.	INDUSTRIAL MATERIALS PRICE INDEX	36	13.4	7.1	14.3	-4.8	86.2	19.9	-11.4	9.5	7.4	11/85
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
63.	STOCK PRICE INDEX (S&P 500)	36	53.3	64.5	54.1	24.8	18.3	7.2	40.0	28.4	43.6	11/85

TABLE 3

RECESSION/RECOVERY STATUS UP TO 36 MONTHS AFTER THE BUSINESS CYCLE TROUGH

DIFFERENCE FROM THE PRECEDING BUSINESS CYCL TROUGH

	Months After Business Cycle Trough	Expansions Starting OCT 1949	MAY 1954#	APR 1958#	FEB 1961	NOV 1970#	MAR 1975	JULY 1980#	Average 1949 -75 (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
I. COMPOSITE INDEXES											
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	36	1.2	-10.9	5.0	-3.1	-8.7	7.0	24.4	1.7	3.3	11/85
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	36	11.9	4.5	11.4	6.9	6.8	15.6	19.4	11.5	4.3	11/85
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	36	20.9	14.9	11.9	13.7	13.8	26.6	17.8	20.4	12.8	11/85
9. LEADING INDEX, GROWTH RATE	35	1.6	-5.7	7.3	4.7	-0.9	17.4	25.1	7.9	-0.4	10/85
10. COINCIDENT INDEX, GROWTH RATE	35	18.3	10.5	9.6	11.6	10.5	20.7	15.8	16.9	9.4	10/85
12. RATIO, COINCIDENT TO LAGGING INDEX	36	1.8	-6.4	-1.5	8.0	20.1	28.9	13.2	12.6	11.4	11/85
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	34			6.7	1.8	7.8	13.9	8.7	7.9	3.6	9/85
II. OUTPUT, INCOME AND SALES											
16. REAL GNP GROWTH RATE	36	6.0	5.1	5.9	6.1	2.9	7.4	7.3	6.5	3.9	IV/85
III. EMPLOYMENT AND UNEMPLOYMENT											
22. EMPLOYMENT TO POPULATION RATIO	36	2.4	1.5	-0.1	0.0	1.2	2.8	-0.8	1.8	3.0	11/85
27. EMPLOYMENT DIFFUSION INDEX, 186 IND.	36	56.1	23.3	10.3	45.3	44.5	65.7	40.9	55.7	28.8	11/85
28. UNEMPLOYMENT RATE: TOTAL	36	-3.9	-1.7	-0.2	-1.3	-0.9	-2.1	1.7	-2.5	-3.6	11/85
29. UNEMPLOYMENT RATE: INSURED	36	-4.9	-2.1	-1.0	-2.4	-1.4	-2.7	-0.7	-3.3	-2.2	11/85
31. SHORT-DURATION UNEMPLOYMENT RATE	36	-2.7	-1.1	-0.5	-0.8	-0.8	-1.3	-0.2	-1.6	-1.5	11/85
32. LAYOFF RATE	35	-0.4	-0.2	-0.2	-0.2	-0.3	-1.5	-0.1	-0.4	-0.4	10/85
33. PART-TIME EMPLOYMENT RATIO	36			0.4	1.1	0.5	0.8	-0.8	1.0	0.6	11/85
IV. INVESTMENT COMMITMENTS AND INVENTORIES											
40. INVENTORY/SALES RATIO, TIMES 10	34	0.8	-1.1	-0.5	-0.9	-1.6	-1.3	-1.1	-0.5	-2.1	9/85
41. CH IN INVENT ON HAND & ON ORDER, BIL 72$	34	9.5	12.9	5.1	17.6	20.6	45.0	10.7	24.0	17.8	9/85
V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
42. OUTPUT PER HOUR, GROWTH RATE	33	0.8	1.3	-1.9	1.9	-0.7	2.5	4.9	1.7	-0.5	III/85
43. UNIT LABOR COSTS, GROWTH RATE	33	3.1	1.9	0.8	-0.6	2.1	-5.9	-10.7	-1.1	-1.9	III/85
44. HOURLY COMPENSATION, GROWTH RATE	33	3.1	4.1	-0.3	0.9	1.1	-3.2	-5.8	0.3	-2.5	III/85
45. REAL HOURLY COMPENSATION, GROWTH RATE	33	-0.5	0.5	1.3	1.0	-1.1	1.0	2.8	0.5	-1.6	III/85
46. SELLING PRICE INDEX, GROWTH RATE	33	1.5	3.0	0.0	0.9	-0.7	-7.6	-6.8	-1.7	-0.1	III/85
47. GROWTH IN PRICES MINUS GROWTH IN COSTS	33	-1.6	1.1	-0.8	1.5	-2.8	-1.7	3.9	-0.6	1.8	III/85
48. CORPORATE PROFIT MARGIN	33	-3.7	0.1	0.6	2.7	0.5	3.4	3.0	0.8	5.8	III/85
49. PRICE/LABOR COST RATIO	33	0.2	0.9	-0.9	3.4	-0.5	2.4	1.7	2.0	4.1	III/85
53. CONSUMER PRICE INDEX, GROWTH RATE	35	3.4	3.3	-2.7	0.4	3.5	-3.4	-9.9	0.1	-1.0	10/85
55. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	36	-4.7	-12.7	20.0	3.9	58.5	33.1	28.9	10.8	9.5	11/85
VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
56. BUSINESS & CONSUMER DEBT, GROWTH RATE	35	11.0	3.6	3.9	5.9	10.5	9.7	-6.6	8.9	8.8	10/85
57. FEDERAL DEBT, GROWTH RATE	35	0.0	-1.0	-1.4	1.9	-2.9	0.3	16.2	0.7	-5.6	10/85
58. TOTAL DEBT, GROWTH RATE	35	3.7	1.6	1.6	4.7	6.9	7.4	-0.3	5.3	5.5	10/85
59. MONEY SUPPLY (M1), GROWTH RATE	36	5.0	-0.2	1.4	1.9	-0.5	3.6	7.7	3.5	1.6	11/85
60. MONEY SUPPLY (M2), GROWTH RATE	36	5.1	0.0	1.7	1.1	-1.8	0.7	4.0	2.3	-2.2	11/85
61. TREASURY BILL RATE (3-MONTH)	36	0.7	2.3	1.2	1.2	2.5	0.8	1.0	0.9	-0.7	11/85
62. NEW CORPORATE BOND YIELD (AA)	36	0.7	1.5	0.8	-0.1	-0.8	-0.7	0.9	-0.0	-1.0	11/85

RECESSION-RECOVERY PATTERN CHARTS

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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 _Handbook of Cyclical Indicators_ for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

RECESSION-RECOVERY PATTERNS

----------	Current recovery to date (business cycle trough: November 1982 or IV Q 1982)
+++++++++	Average of three long recoveries (1949-53, 1961-69, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average previous recovery developed beyond the present point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background. One can see easily where new figures or forecasts would be placed.

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side of most charts is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the trough standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the three cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, ratios or changes (e.g., the unemployment rate or GNP growth rate, employment to population ratio, or change in inventories), the charts show actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle. This scale shows how the averages for previous recoveries translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference.

The averages, which extend out to four years after the trough, include three recoveries: 1949-53, 1961-69 and 1975-80. The 1954-57, 1958-60, 1970-73 and 1980-81 recoveries, which lasted 39, 24, 36 and 12 months respectively, are excluded to avoid including the subsequent recessions in the averages.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in the preceding three tables.

COMPOSITE INDEXES

CHART 1
BUSINESS WEEK LEADING INDEX (CIBCR)

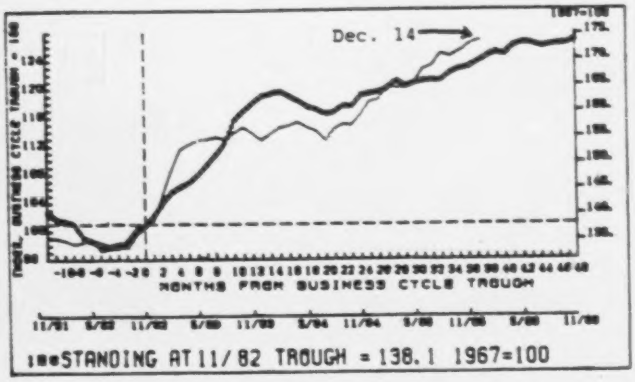


CHART 2
LEADING EMPLOYMENT INDEX (CIBCR)

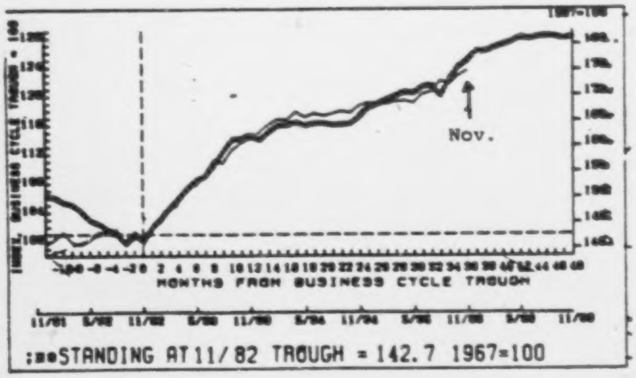


CHART 3
COINCIDENT EMPLOYMENT INDEX (CIBCR)

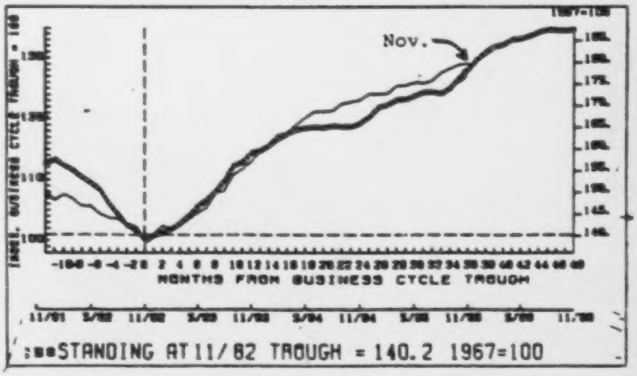


CHART 4
LEADING INDEX (BCD)

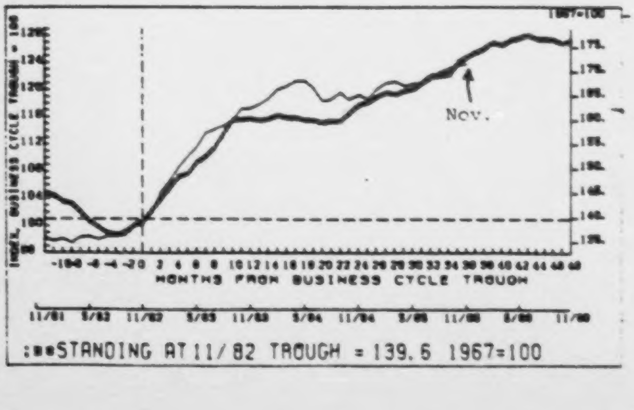
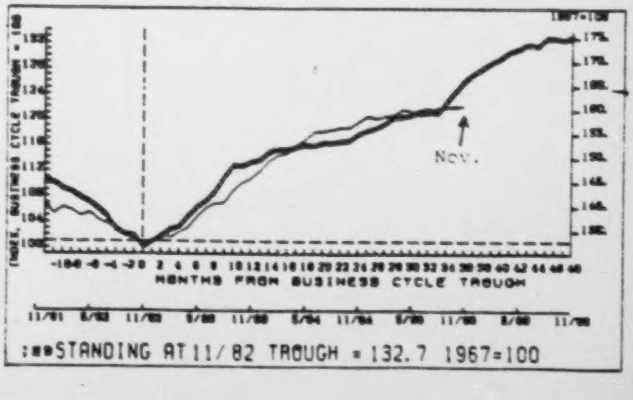


CHART 5
COINCIDENT INDEX (BCD)



COMPOSITE INDEX GROWTH RATES

CHART 6
BUSINESS WEEK LEADING INDEX,
GROWTH RATE (CIBCR)

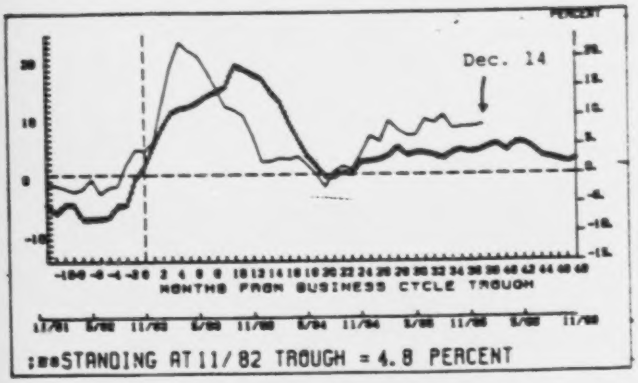


CHART 7
LEADING EMPLOYMENT INDEX,
GROWTH RATE (CIBCR)

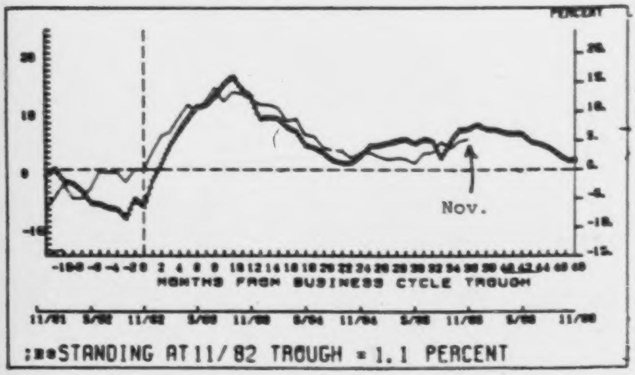


CHART 8
COINCIDENT EMPLOYMENT INDEX,
GROWTH RATE (CIBCR)

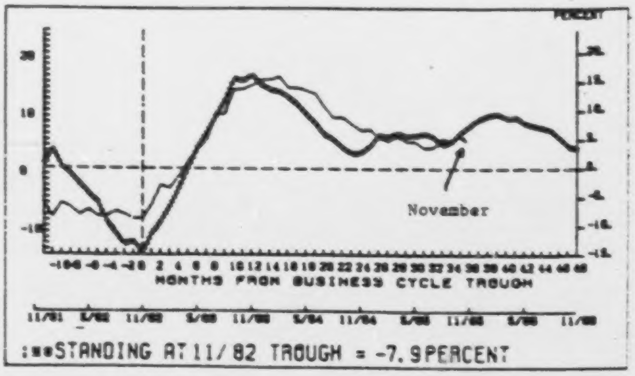


CHART 9
LEADING INDEX, GROWTH RATE (BCD)

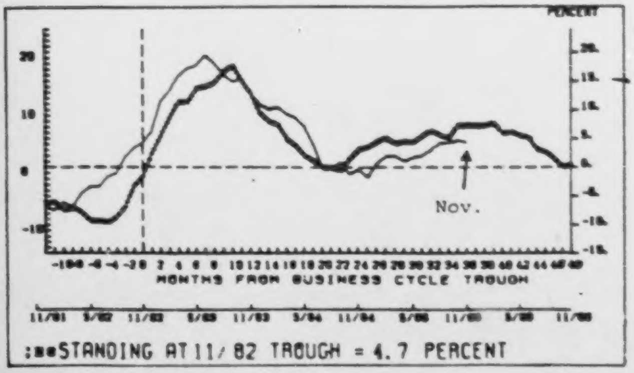
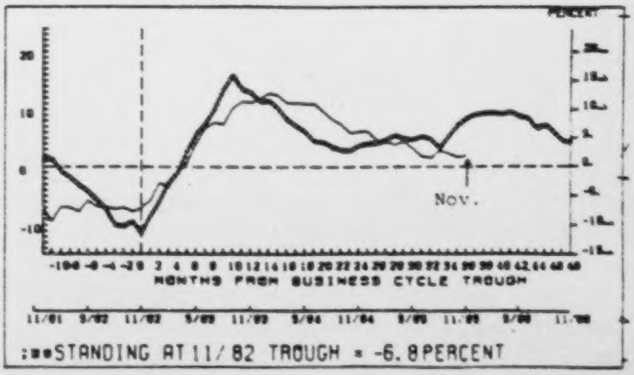


CHART 10
COINCIDENT INDEX, GROWTH RATE (BCD)



OTHER COMPOSITE INDEXES

CHART 11
LAGGING INDEX (BCD)

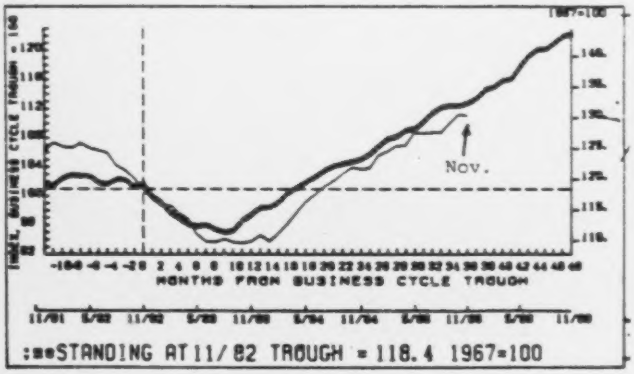


CHART 12
RATIO, COINCIDENT TO LAGGING INDEX (BCD)

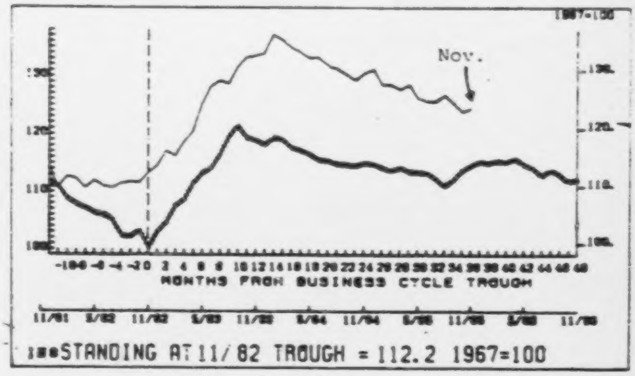


CHART 13
EIGHT-COUNTRY LEADING INDEX (CIBCR)*

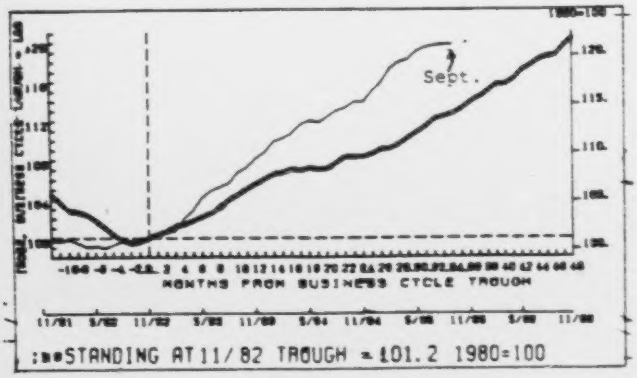
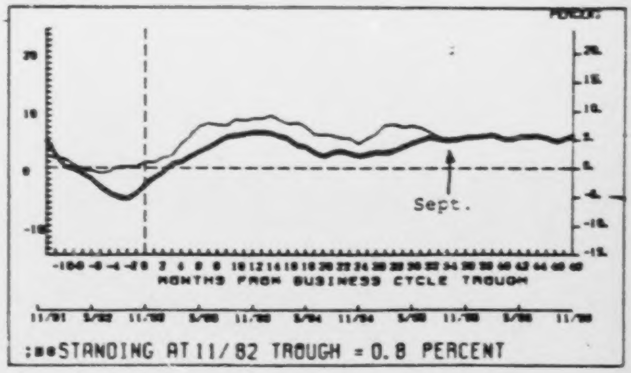


CHART 14
EIGHT-COUNTRY LEADING INDEX,
GROWTH RATE (CIBCR)*



*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia and Taiwan

OUTPUT, INCOME AND SALES

CHART 15
REAL GNP

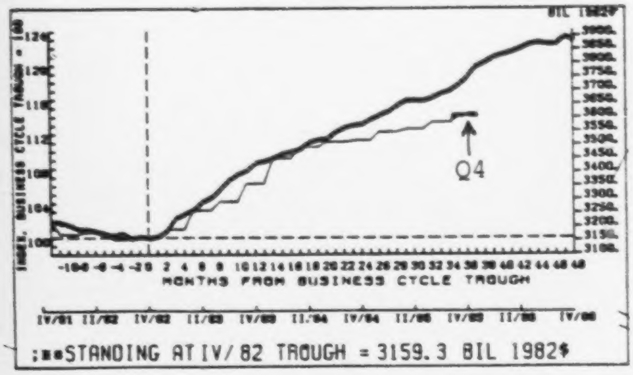


CHART 16
REAL GNP, GROWTH RATE

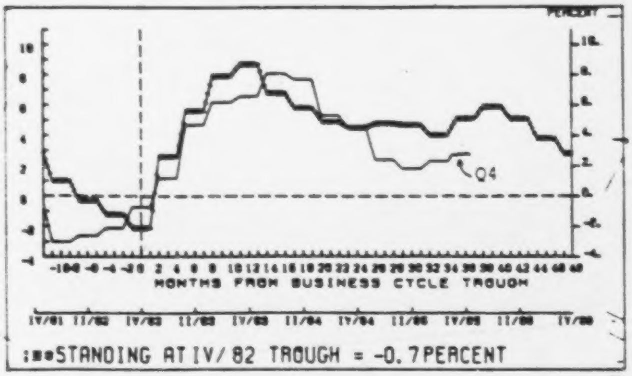


CHART 17
INDUSTRIAL PRODUCTION INDEX

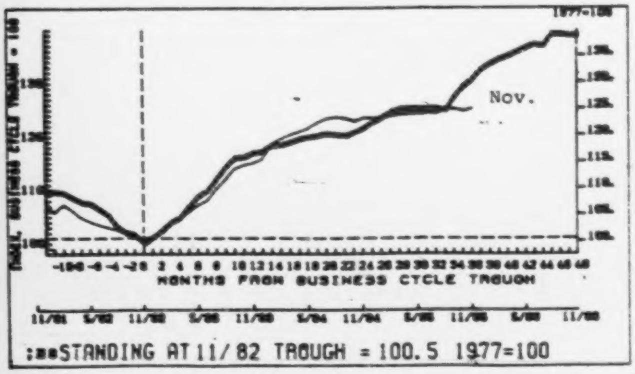


CHART 18
REAL PERSONAL INCOME

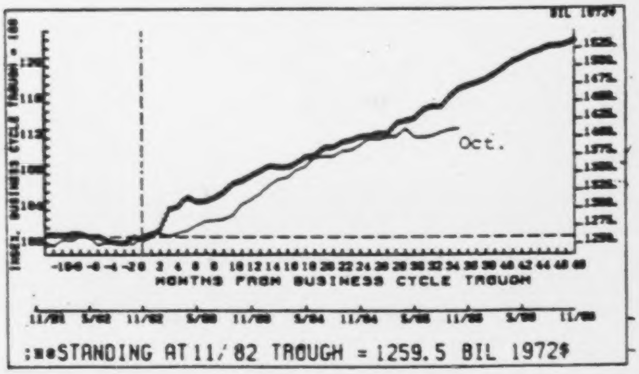


CHART 19
REAL CONSUMER EXPENDITURES

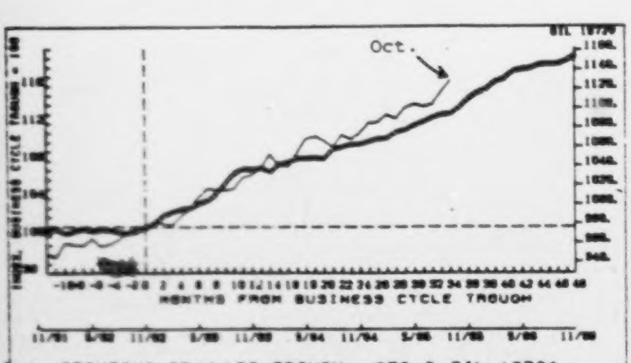
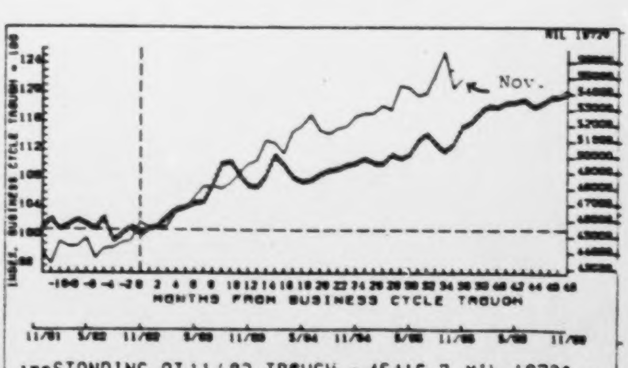
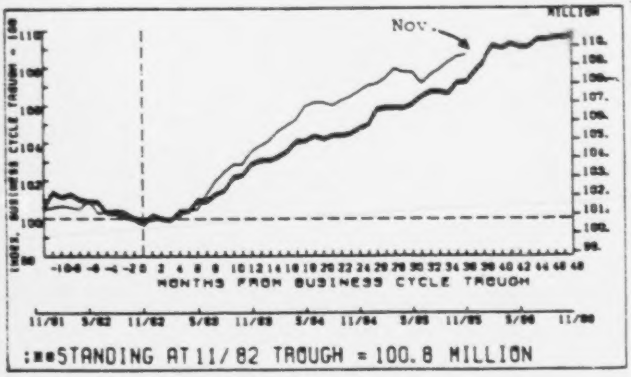


CHART 20
REAL RETAIL SALES



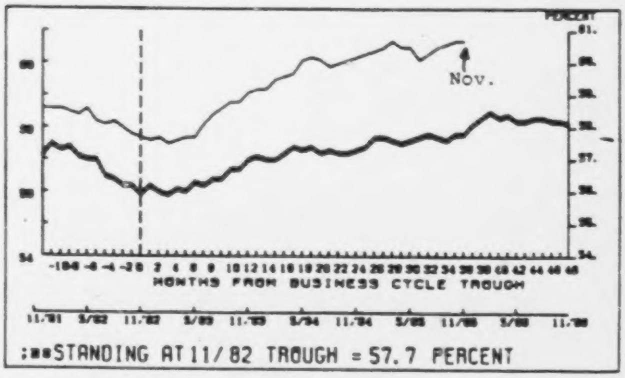
EMPLOYMENT

CHART 21
TOTAL EMPLOYMENT



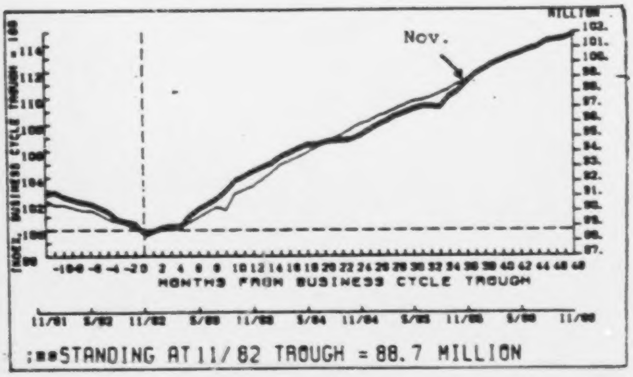
:**STANDING AT 11/82 TROUGH = 100.8 MILLION

CHART 22
EMPLOYMENT TO POPULATION RATIO



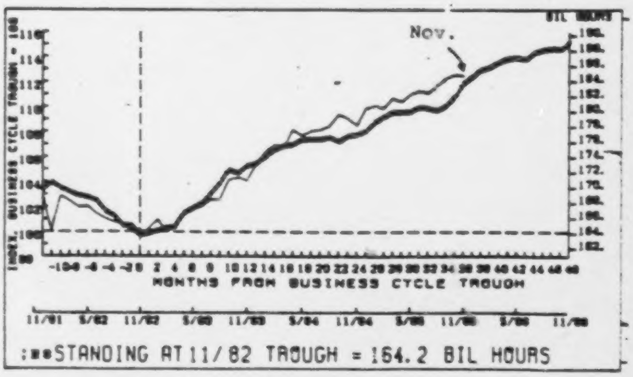
:**STANDING AT 11/82 TROUGH = 57.7 PERCENT

CHART 23
NONFARM EMPLOYMENT



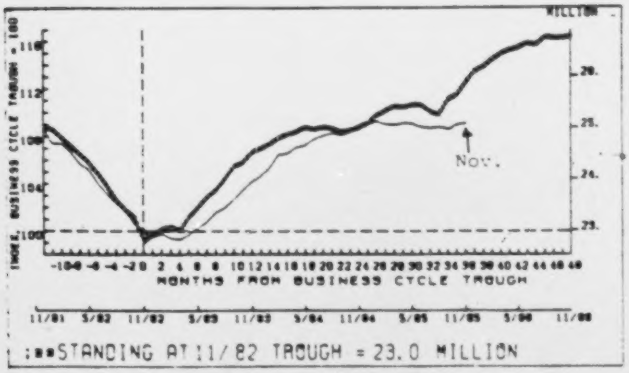
:**STANDING AT 11/82 TROUGH = 88.7 MILLION

CHART 24
NONFARM EMPLOYEE HOURS



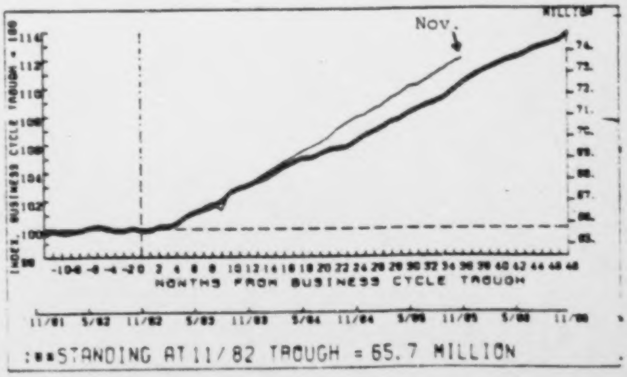
:**STANDING AT 11/82 TROUGH = 164.2 BIL HOURS

CHART 25
EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES



:**STANDING AT 11/82 TROUGH = 23.0 MILLION

CHART 26
EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES



:**STANDING AT 11/82 TROUGH = 65.7 MILLION

UNEMPLOYMENT

CHART 27
EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES

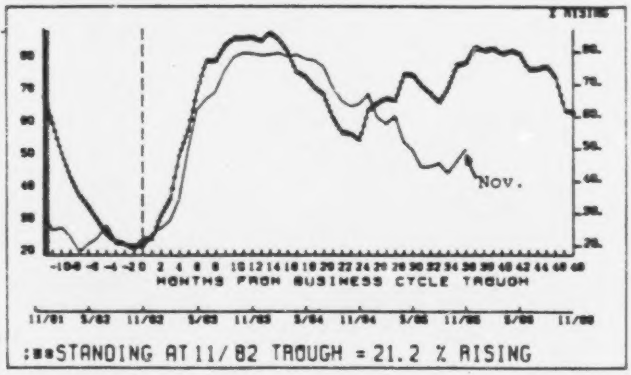


CHART 28
UNEMPLOYMENT RATE: TOTAL

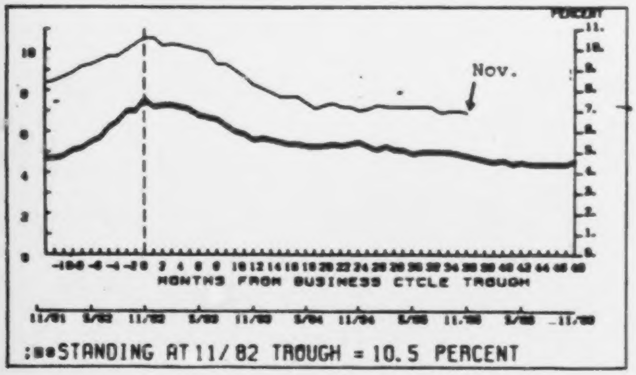


CHART 29
UNEMPLOYMENT RATE: INSURED

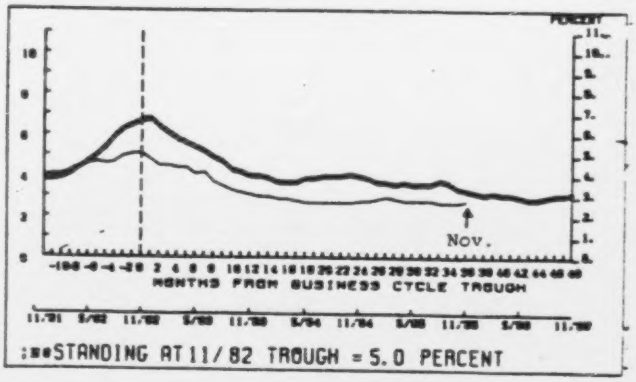


CHART 30
INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

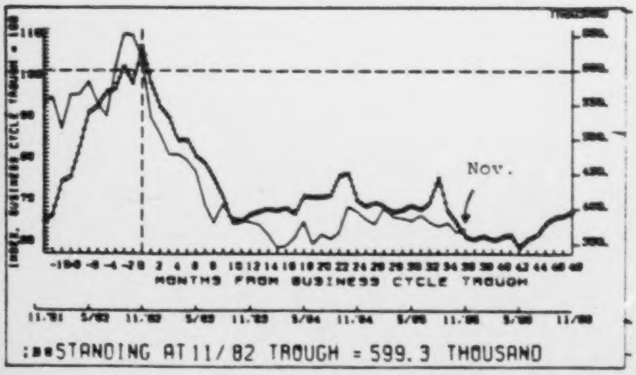
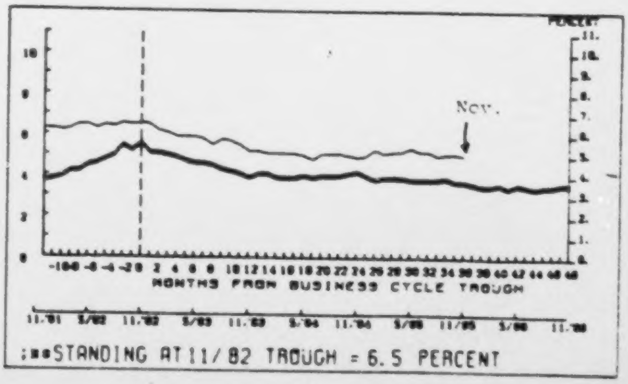


CHART 31
SHORT-DURATION UNEMPLOYMENT RATE
(UNDER 15 WEEKS)



OTHER LEADING EMPLOYMENT INDICATORS

CHART 32
LAYOFF RATE

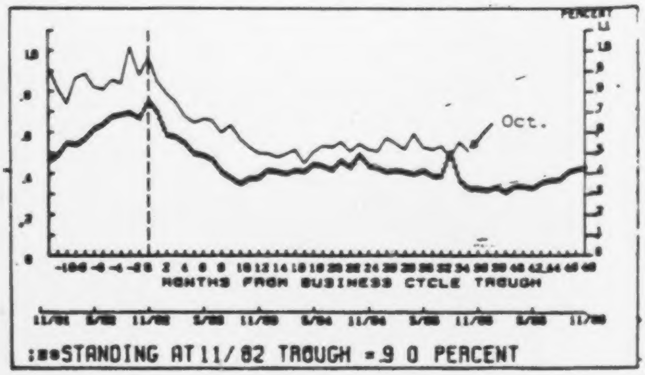


CHART 33
VOLUNTARY-INVOLUNTARY
PART-TIME EMPLOYMENT RATIO

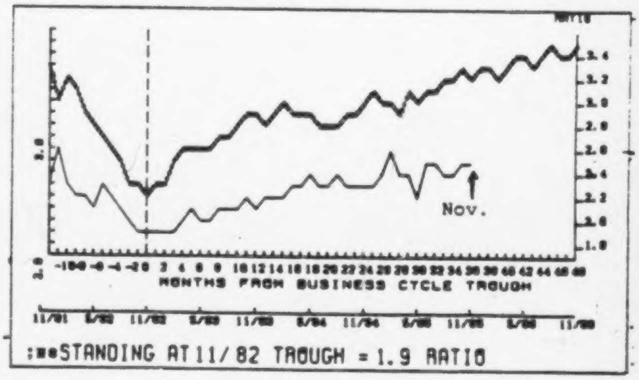


CHART 34
AVERAGE WORKWEEK, MANUFACTURING

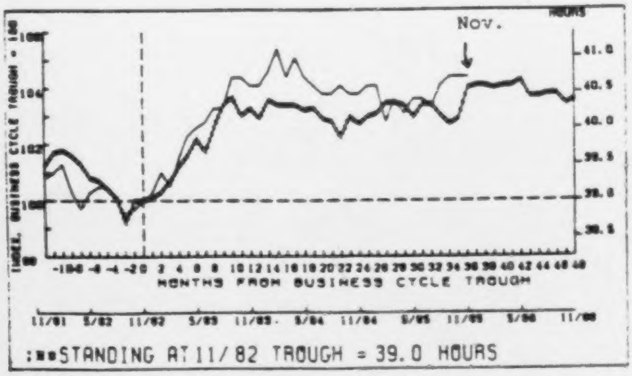
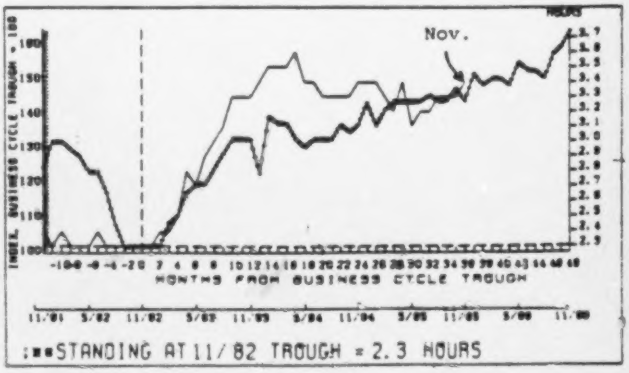


CHART 35
OVERTIME HOURS, MANUFACTURING



INVESTMENT COMMITMENTS AND INVENTORIES

CHART 36
NEW PRIVATE HOUSING STARTS

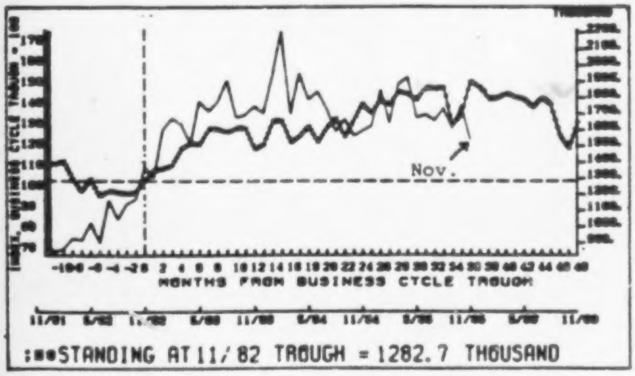


CHART 37
NEW PRIVATE HOUSING PERMITS

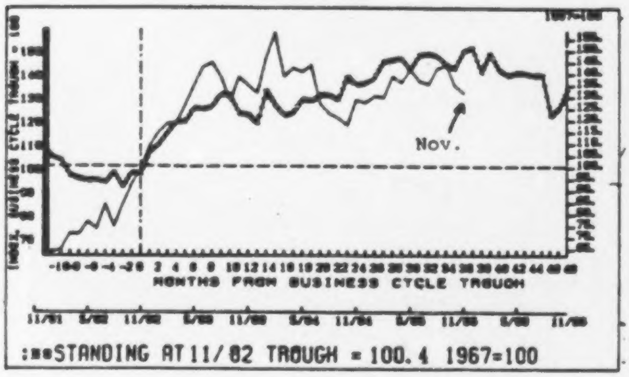


CHART 38
CONTRACTS & ORDERS, PLANT & EQUIPMENT

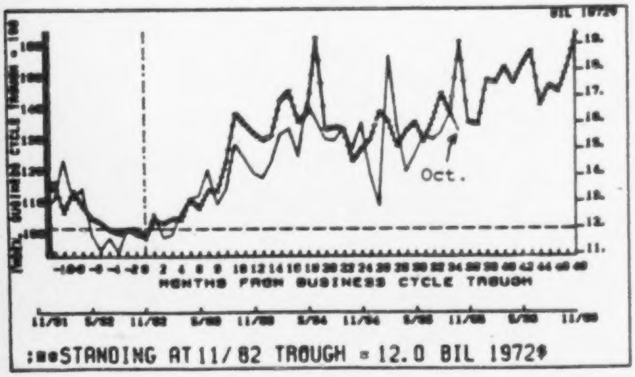


CHART 39
NEW CAPITAL APPROPRIATIONS, MFG.

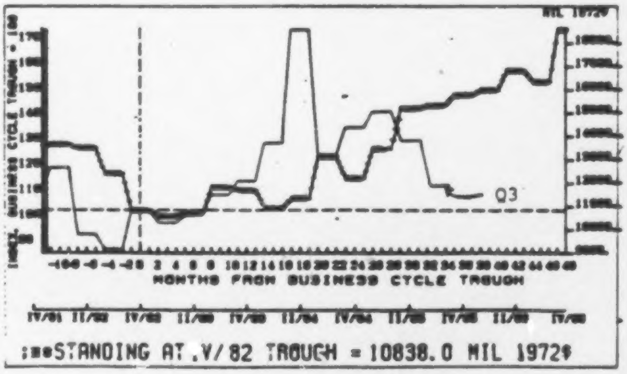


CHART 40
INVENTORY/SALES RATIO, MFG. AND TRADE

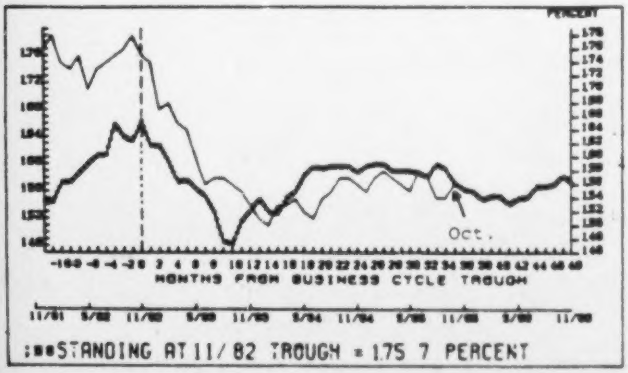
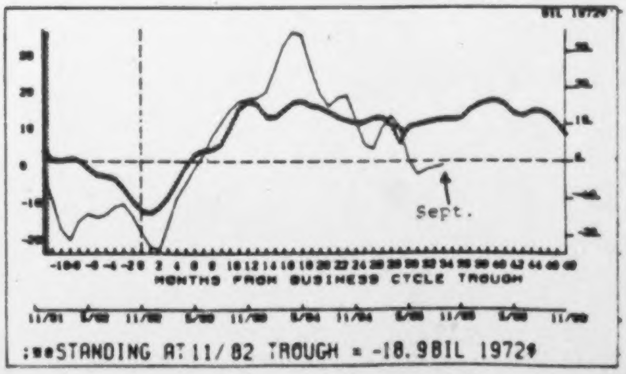


CHART 41
CHANGE IN INVENTORIES ON HAND & ON ORDER



PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

CHART 42
OUTPUT PER HOUR, GROWTH RATE

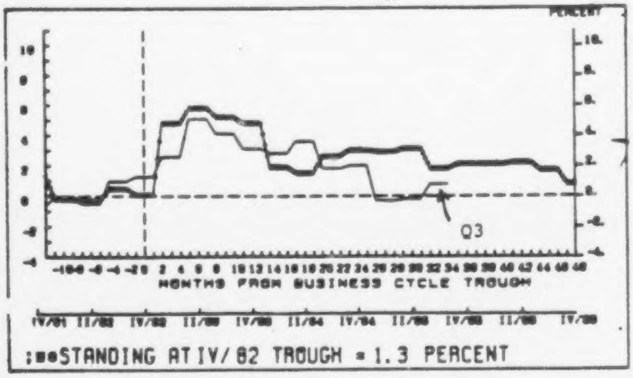


CHART 43
UNIT LABOR COSTS, GROWTH RATE

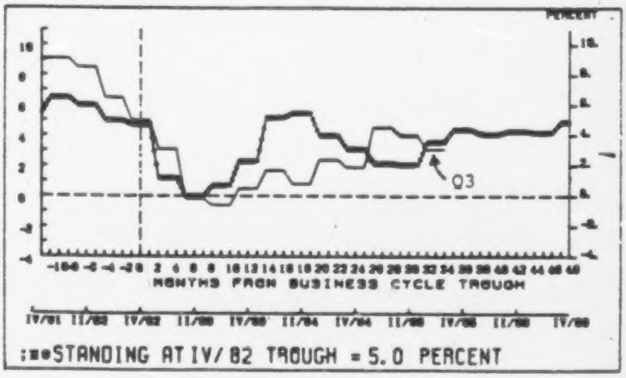


CHART 44
HOURLY COMPENSATION, GROWTH RATE

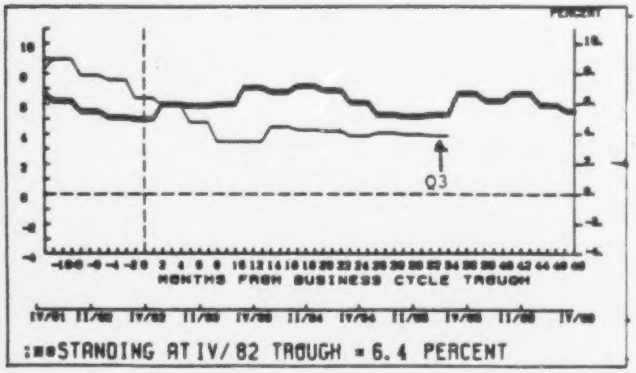


CHART 45
REAL HOURLY COMPENSATION, GROWTH RATE

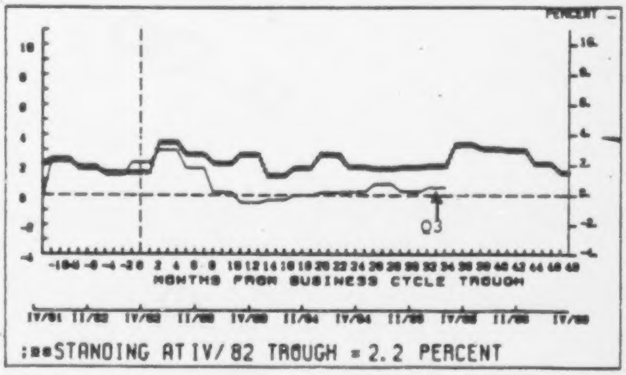


CHART 46
SELLING PRICE INDEX, GROWTH RATE

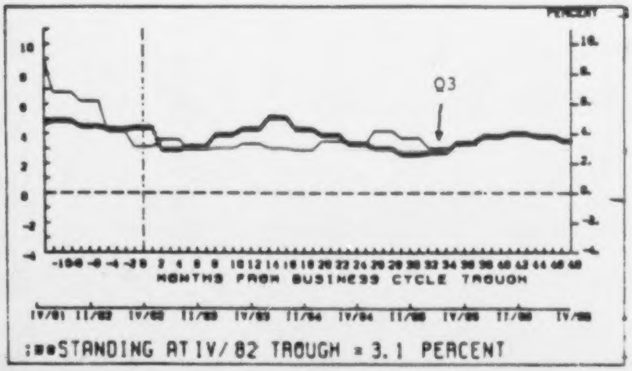
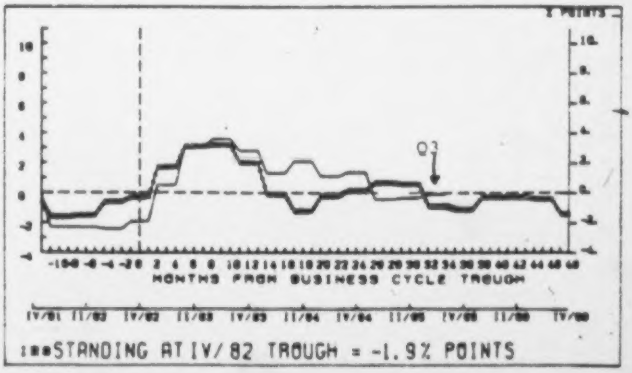


CHART 47
GROWTH RATE IN PRICES MINUS GROWTH RATE IN UNIT LABOR COSTS



PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

CHART 48
CORPORATE PROFIT MARGIN

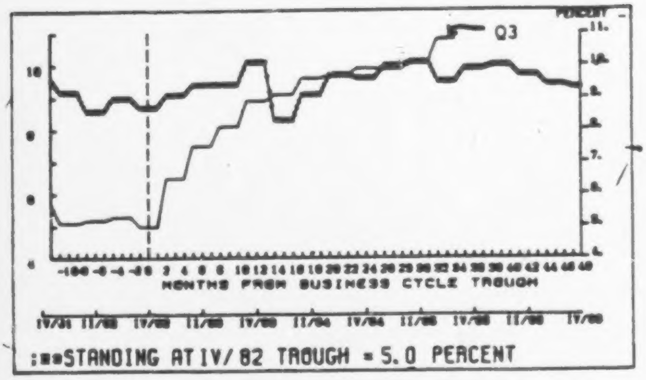


CHART 49
PRICE/LABOR COST RATIO

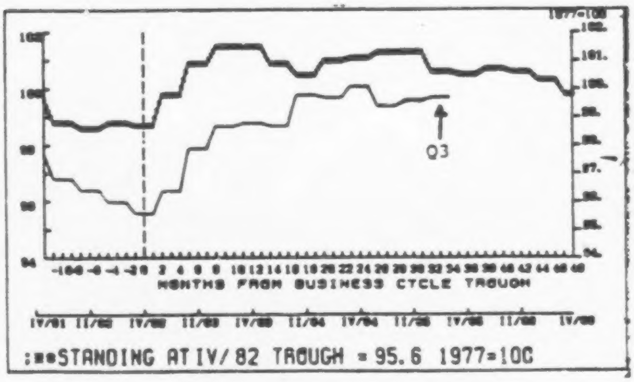


CHART 50
BUSINESS FAILURES, LIABILITIES OVER $100,000

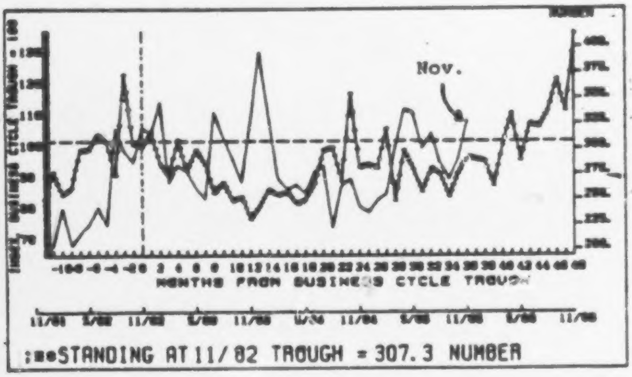


CHART 51
LEADING INDEX OF INFLATION (CIBCR)

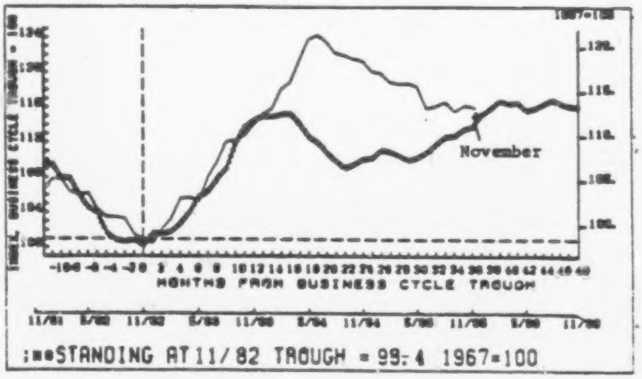


CHART 52
CONSUMER PRICE INDEX

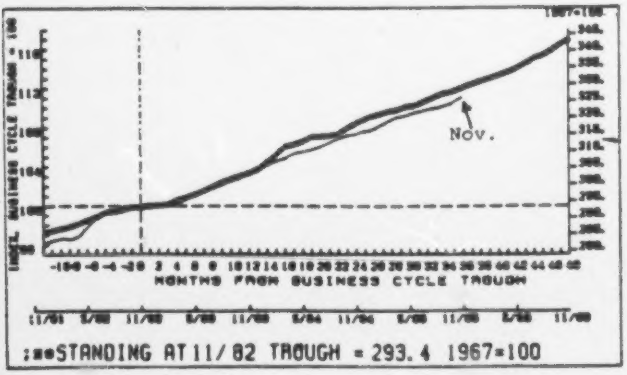
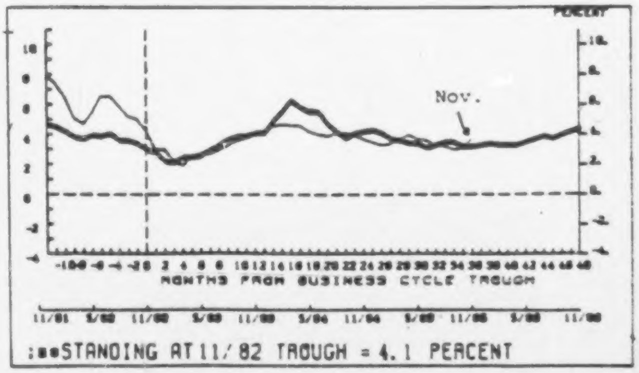


CHART 53
CONSUMER PRICE INDEX, GROWTH RATE



MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

CHART 54
INDUSTRIAL MATERIALS PRICE INDEX, JOURNAL OF COMMERCE

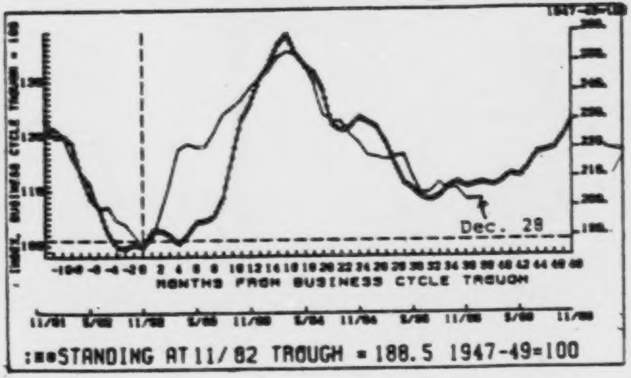


CHART 55
INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE

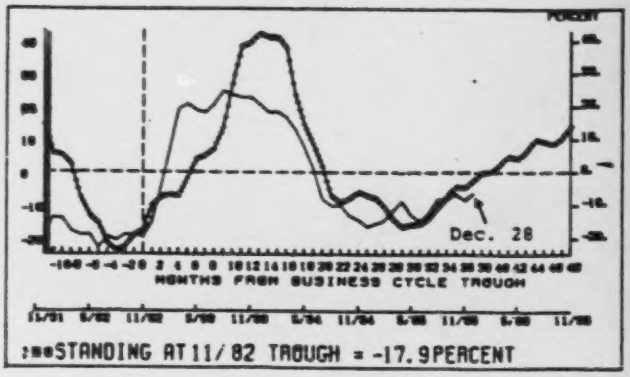


CHART 56
BUSINESS & CONSUMER DEBT, GROWTH RATE

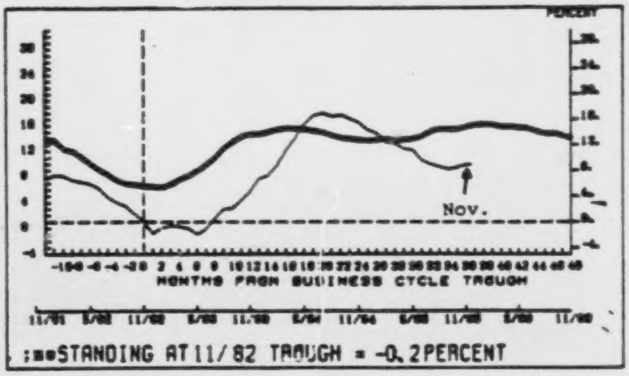


CHART 57
FEDERAL DEBT, GROWTH RATE

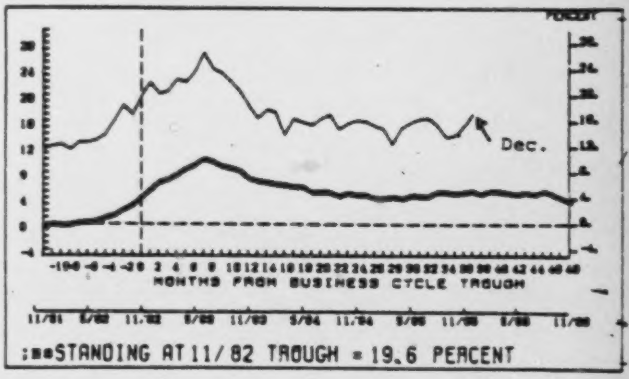


CHART 58
TOTAL DEBT, GROWTH RATE

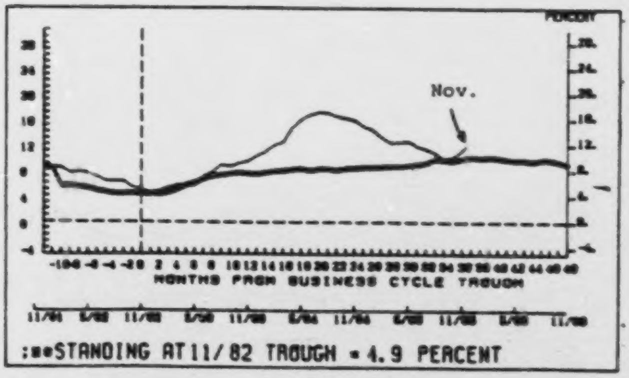
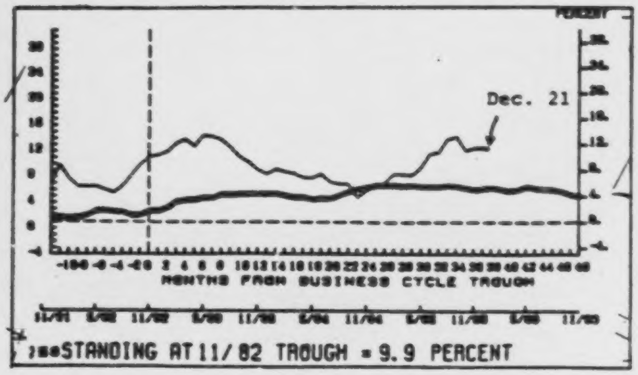
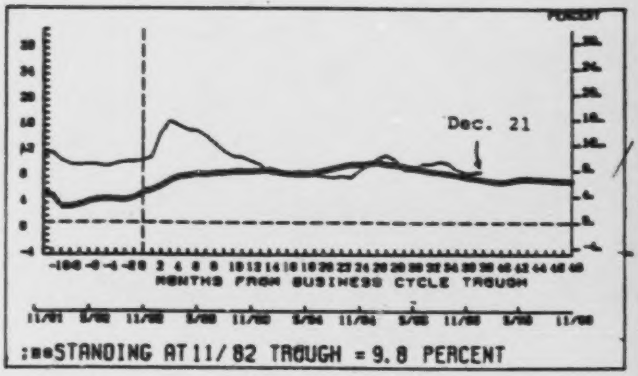


CHART 59
MONEY SUPPLY (M1), GROWTH RATE



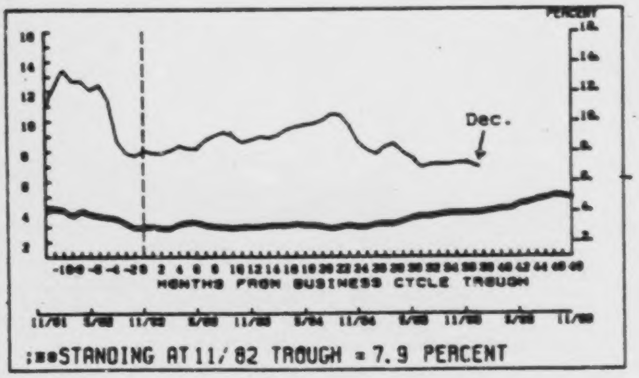
:■●STANDING AT 11/82 TROUGH = 9.9 PERCENT

CHART 60
MONEY SUPPLY (M2), GROWTH RATE



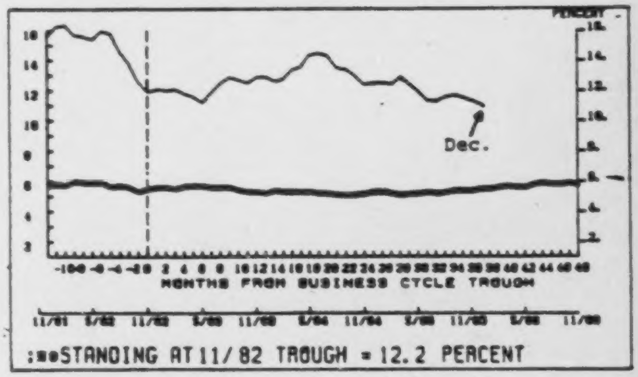
:■●STANDING AT 11/82 TROUGH = 9.8 PERCENT

CHART 61
TREASURY BILL RATE (3-MONTH)



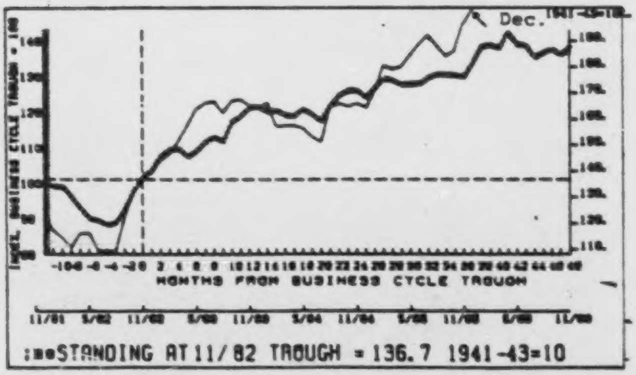
:■●STANDING AT 11/82 TROUGH = 7.9 PERCENT

CHART 62
NEW CORPORATE BOND YIELD (AA)



:■●STANDING AT 11/82 TROUGH = 12.2 PERCENT

CHART 63
COMMON STOCK PRICE INDEX (S&P 500)



:■●STANDING AT 11/82 TROUGH = 136.7 1941-43=10

ABOUT THE CENTER FOR INTERNATIONAL BUSINESS CYCLE RESEARCH

The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1985 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report
Designed to Assist in the Evaluation of Current Business Conditions

Published by the **Center for International Business Cycle Research,**
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 8 No. 1
February 1986

Summary

Although the leading indexes have been moving up vigorously enough to suggest that the 1984-85 slowdown may be over, the major measures of output, employment, income and sales have not been moving consistently enough to say when it ended. The answer will come when the consensus of these measures shows that growth rates are above their long-run trend levels. Such a consensus has not yet emerged, but it seems likely to do so during 1986 in view of the strong performance of the leaders. Comparisons with earlier recoveries that lasted four years or more, which help us to judge the staying power of the current recovery, also are beset by statistical inconsistencies in the current data. Some of them have to do with the size of the trade deficit. But none of the major measures of economic activity suggest that the recovery is about to end.

Has the Growth Recession Ended?

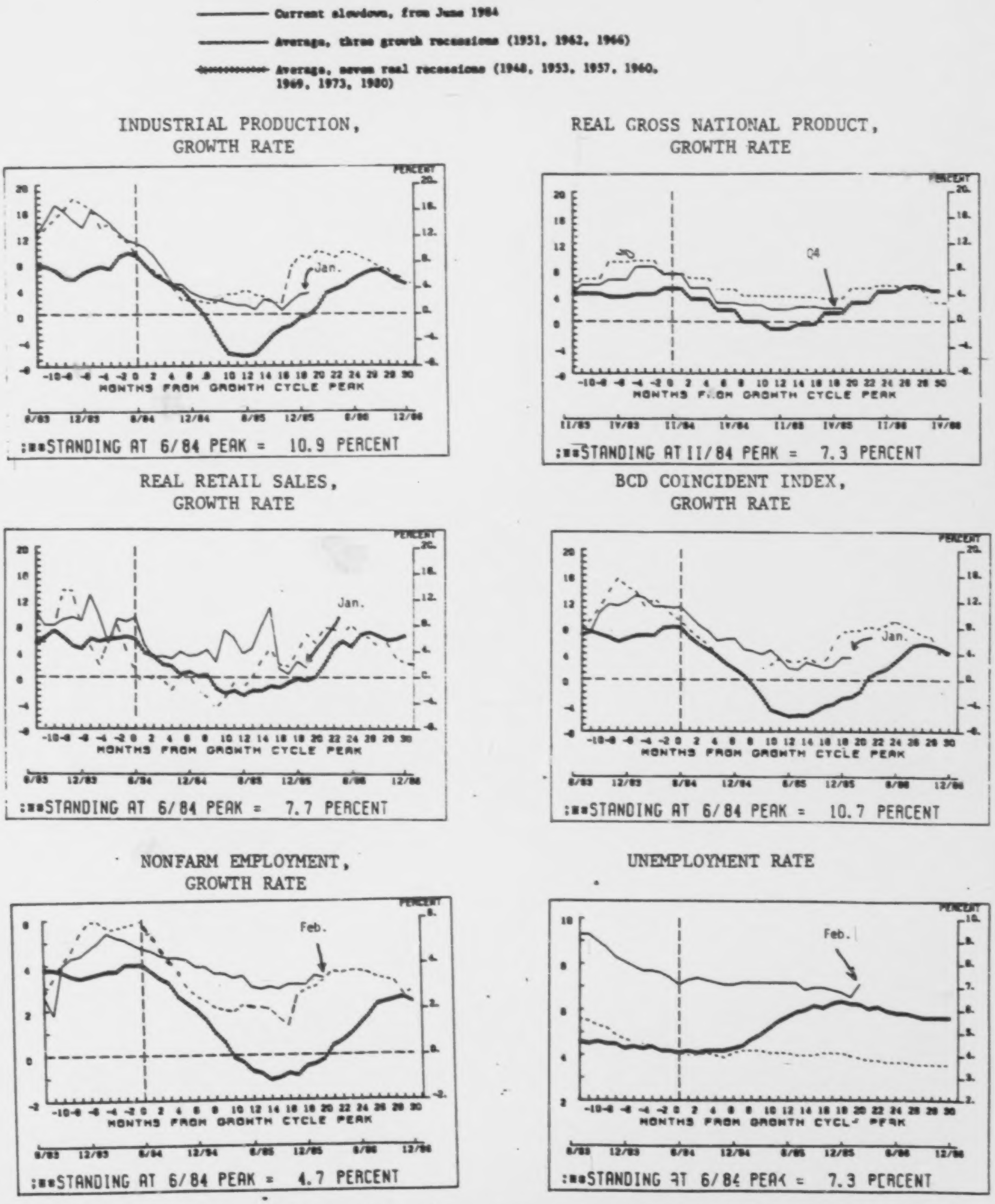
No question about it, say the leading indexes. All three of the leading indexes (Chart A) have been registering growth rates well above their long-run trend rate, which is 3.3% per year in each case.* The latest six-month smoothed growth rates are as follows:

	Date	Percent
Business Week Leading Index	Mar. 1, 1986	7.2
Leading Employment Index	Feb. 1986	4.1
BCD leading Index	Jan. 1986	4.8

*Trend rates of growth used in this section pertain to the period 1948-79. See Business Conditions Digest, March 1979, p. 107.

CHART A.

Current Slowdown Compared with Three Growth Recessions and Seven Real Recessions



Growth rates are six-month smoothed or two-quarter smoothed annual rates, based on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

CHART A., continued

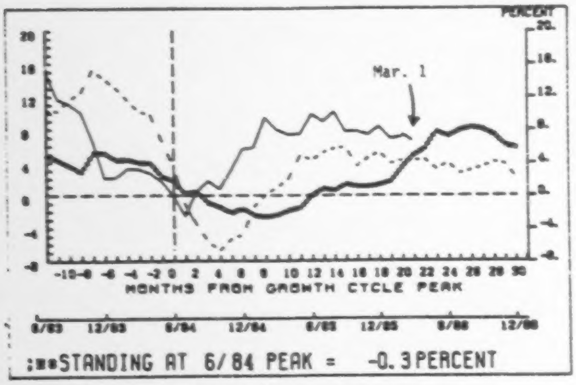
Current Slowdown Compared with Three Growth Recessions and Seven Real Recessions

———— Current slowdown, from June 1984

———— Average, three growth recessions (1951, 1962, 1966)

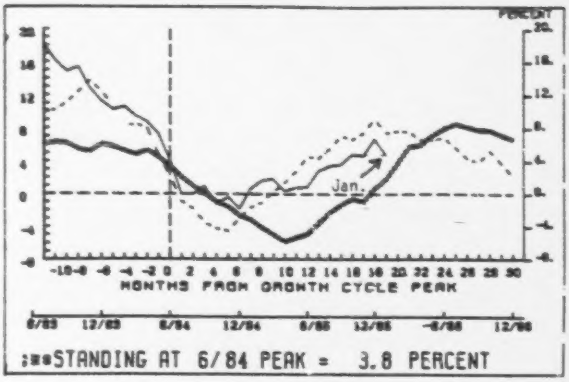
············ Average, seven real recessions (1948, 1953, 1957, 1960, 1969, 1973, 1980)

BUSINESS WEEK LEADING INDEX,
GROWTH RATE



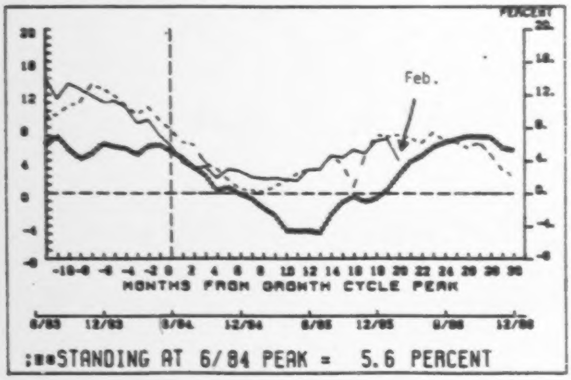
:**STANDING AT 6/84 PEAK = -0.3 PERCENT

BCD LEADING INDEX,
GROWTH RATE



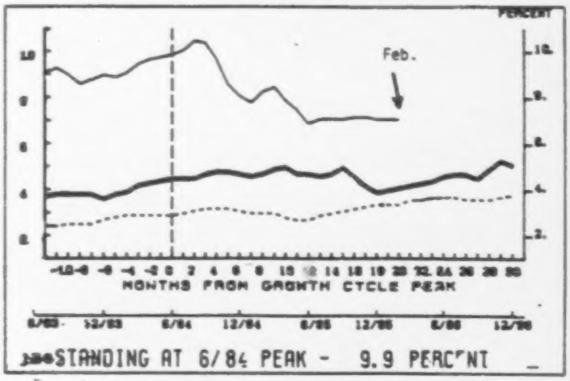
:**STANDING AT 6/84 PEAK = 3.8 PERCENT

LEADING EMPLOYMENT INDEX,
GROWTH RATE (CIBCR)



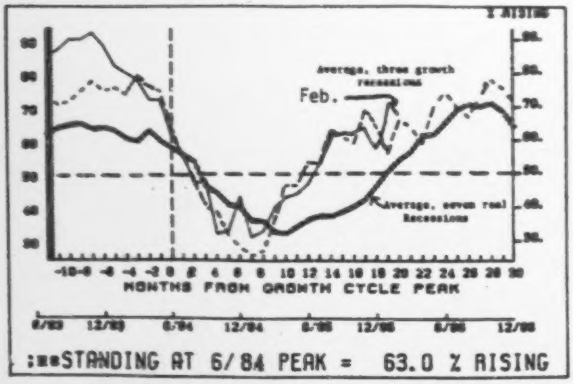
:**STANDING AT 6/84 PEAK = 5.6 PERCENT

TREASURY BILL RATE
(SIX MONTH)



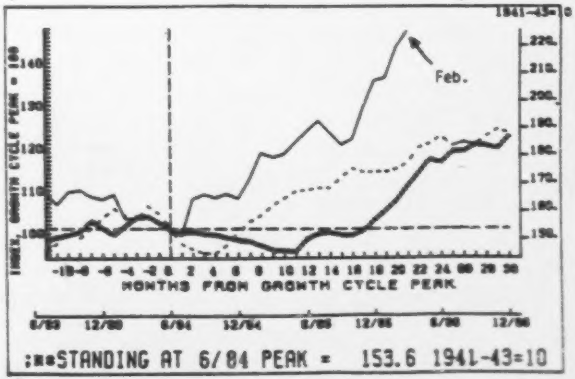
:**STANDING AT 6/84 PEAK - 9.9 PERCENT

DIFFUSION INDEX
OF LEADING INDICATORS



:**STANDING AT 6/84 PEAK = 63.0 % RISING

COMMON STOCK PRICE INDEX
(S&P 500)



:**STANDING AT 6/84 PEAK = 153.6 1941-43=10

Growth rates are six-month smoothed or two-quarter smoothed annual rates, based on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

Moreover, this condition of above-average growth rates in these indexes has persisted for some time: since December 1984 in the Business Week Index and since August 1985 in the other two indexes. It is not a flash in the pan.

The coincident indicators, however, are more equivocal on this matter. The coincident employment index, which combines five comprehensive measures of employment and unemployment, hardly registered a growth recession at all, although it slowed down considerably. The lowest growth rate it reached, in July 1985, was 3.7%, which is above its 3.3% trend. Since then it has speeded up, with growth rates in the 4 to 7% range. The February 1986 figure is 4.2%.

The BCD coincident index, which includes four measures of production, employment, real income and sales, slowed more decisively, reaching its lowest rate, 1.6%, in July. Since then the growth rate has climbed, exceeding the 3.3% trend rate for the first time in December, at 3.5%. The January 1986 rate also was 3.5%. Hence its testimony concerning the end of the growth recession is tentative, since these rates are not much above the trend and they've persisted for only two months. Nevertheless, the monthly figures suggest that October 1985 may have been the low month for the growth recession, since the growth rate from October to January was 6.1%. The industrial production index, with a long-run trend of 4.2%, has had a below-trend growth rate since December 1984. The rate hit a low of 0.6% in October 1985, and by January 1986 had recovered to 3.3%. That is still below the trend rate, however.

Real GNP has been sluggish also. It's smoothed growth rate fell below the trend rate, 3.5%, in the fourth quarter of 1984. It has remained below the trend rate through the fourth quarter of 1985, when it registered 2.0%.

The inconsistencies among the coincident indicators are puzzling. Why should employers be putting more people to work if not to increase output? Usually in recessions it is the other way around: output begins to rise shortly before employment does. As a result, productivity picks up. The productivity data have shown no sign of improvement through the fourth quarter. If the employment figures are correct, is the growth of output being understated? Although we have no evidence to show that this is so, the question needs to be addressed. Perhaps the issue will be resolved this year, when we see whether the strong signals from the leading indicators during 1985 are supported by stronger growth in the economy during 1986. Until then, a decisive verdict on the end of the growth recession cannot be rendered.

Economic Performance in Long-lived Recoveries

Some inconsistencies have developed among the major indicators of the economy's performance in the current recovery as compared with the average of the three previous long-lived recoveries. The 14% increase in real GNP since 1982 has fallen short of the 20% average increase for the first twelve quarters of the previous recoveries (Chart 15). Industrial production also has fallen short, with a 26% increase through January 1986 compared with an average 33% rise during the first 38 months of the previous recoveries (Chart 17). But the increase in employment has been up to if not above par, depending on which measure is used (Charts 21, 23, and 24). Moreover, both the percentage employed and the total unemployment rate have improved more than average (Charts 22, 28). On the other hand, the insured unemployment rate has had a smaller than average decline (Chart 29). The coincident employment index, which embraces all these measures of labor market conditions (except the percentage employed) has risen 29% through February, just a little short of the average increase of 31% in the first 39 months of the three earlier long-lived recoveries. The January comparison was 31% for the current recovery vs. 30% for the past.

Retail sales after adjustment for inflation has turned in a better than average performance, but the advance in real consumer expenditures has barely kept up with the average (Charts 19, 20). On the other hand, real personal income has done less well than average (Chart 18), mimicking real GNP in this respect.

The coincident index compiled by the Commerce Department, which includes industrial production, nonfarm employment, real personal income and real manufacturing and trade sales, gives the current recovery a below-average rating. It rose 23% from November 1982 through January 1986, compared with a 27% average increase in the first 39 months of the three long-lived recoveries (Chart 5).

Further insight into what has produced the shortfall in real GNP can be had from Table A. Here we use annual data and compare changes over the first three years of recovery in terms of both billions of 1982 dollars and percent changes.

We find that in deflated dollars the increase in real GNP was bigger in this recovery than in the average of the three earlier recoveries, although in percentage terms it was smaller. We also find that every major component except two contributed to the bigger dollar increase. Those two were Federal government purchases of goods and services, which went up less than the average, and net exports, where the decline was much bigger than average. The drop in the net export balance was due both to the small decline in exports and the big rise in imports. Excluding net exports, the current recovery in all the rest of GNP, which is called gross domestic purchases, was much bigger than average in real dollars, and almost as big in percentage terms. For more on the subject of net exports, see below.

TABLE A.
CHANGES IN REAL GNP DURING FIRST THREE YEARS OF RECOVERIES

	Change in bil. 1982$		Percent Change	
	1982 to 1985	Average 3 recoveries[a]	1982 to 1985	Average, 3 recoveries[a]
Real GNP, total	405	319	13	18
Consumption Expenditures	262	157	13	13
Residential Fixed Investment	66	31	63	30
Nonresidential Fixed Investment	105	44	29	22
Federal govt. purchases	50	57	18	45
State & local govt. purchases	25	20	7	10
Change in business inventories	30	26	-	-
Net Exports	-133	-16	-	-
Exports	-2	29	-1	19
Imports	131	45	39	32
Gross Domestic Purchases[b]	538	335	18	19

[a] Average change during 1949-52, 1961-64, and 1975-78.

[b] Total GNP less exports.

Source: U.S. Department of Commerce.

By the criterion of gross domestic purchases (adjusted for inflation) as well as employment and unemployment, the first three years of the current recovery have achieved a growth rate close to the average of the first three years of the previous long-lived recoveries. This in itself bodes well for the fourth year, 1986. If we've done it before we can do it again!

How Big is the Real Trade Deficit?

From time to time Recession-Recovery Watch has included an alternative measure of net exports in constant dollars. The shift in the GNP accounts to 1982 dollars from 1972 dollars has changed the picture on this considerably, because import prices were much higher relative to export prices in 1982 than 1972. By the Commerce Department's method of calculation this shift reduced the level of net exports in constant dollars. In recent years it has made the trade deficit larger, and in earlier years it changed the trade surplus into a deficit. In fact, during the 21 years from 1958 to 1978 when the United States enjoyed a net export surplus in current dollars, the figures in 1982 dollars show a deficit in every year but three.

The alternative procedure that we have used, based on a suggestion by Solomon Fabricant, is to deflate net exports by the price deflator for gross domestic purchases, which includes everything in GNP except net exports. Surpluses remain surpluses and deficits remain deficits, and their relative impact on real GNP is exactly the same as on current dollar GNP. The implicit price deflator for GNP then is the same as the deflator for gross domestic purchases. This avoids the anomaly in the Commerce Department's GNP deflator, whereby an increase in the import price level relative to the export price level, say by a decline in the dollar exchange rate or a drop in oil prices, reduces the GNP deflator.

In the fourth quarter of 1985, when the current dollar net exports deficit was -106.9 billion, the 1982 dollar deficit by the Commerce Department's reckoning was -134.0 billion, compared to -95.6 billion by the method described above. That is, the real deficit was about 25% larger than the current dollar figure when the Commerce Department's method is used, but 11% smaller when our method is used. Everything else in GNP also is 11% smaller in 1982 dollars than in current dollars, since the price level has risen that much since 1982. The result is that the effect of the deficit on real GNP is considerably larger with the Commerce Department's method. By their method, the deficit reduced the level of real GNP in the fourth quarter by 3.7%; by our method, the deficit reduced real GNP only 2.6%.

The calculations for recent quarters by both methods are shown in Table B. Note that the real net export deficit by the official method (line 5) is larger than the current dollar deficit (line 2) in every quarter. This implies that the implicit price deflator for net exports is less than 100 (line 11). It reflects the slower rise in import prices than in export prices since 1982. This in turn makes the official implicit price deflator for total GNP (line 9) higher than it would otherwise be, because the net export deflator gets a negative weight whenever there is a deficit in real terms. The implicit price deflator that we use (line 10) is unaffected by these complications. Moreover, it is far more stable in its movements from quarter-to-quarter (compare lines 10 and 11 in the percent change section of Table B). In our approach, the net export deficit in current dollars is treated simply as a magnitude whose purchasing power is to be evaluated in terms of the general level of domestic prices.

The effect of our method is much less consequential for total GNP than for net exports, since the latter is a relatively small component of the total. Real GNP growth rates in recent quarters have been somewhat higher by our method than by the official method (compare lines 8 and 4). In the fourth quarter, however, our method produces an 0.9% growth rate as compared with the official 1.2%. The reason is that the real net deficit increased by 21% between the third and fourth quarter by our calculation, whereas it increased only 12% by Commerce's. The current dollar deficit rose 22%. The official calculation cut the percentage increase in the deficit roughly in half, and consequently produced a higher growth rate in total GNP than our method did.

TABLE B.
ALTERNATIVE MEASURES OF OUTPUT, NET EXPORTS AND PRICES

	Levels						
	II/84	III/84	IV/84	I/85	II/85	III/85	IV/85
In Current dollars (billions)							
1. Total GNP	3757.5	3812.2	3852.5	3917.5	3960.9	4016.9	4061.5
2. Net exports	-65.3	-62.9	-72.2	-42.3	-70.3	-87.8	-106.9
3. Gross domestic purchases (1-2)	3822.8	3874.1	3924.7	3959.8	4030.9	4104.7	4168.4
In 1982 dollars							
4. Total GNP, official	3492.6	3510.4	3515.6	3547.8	3557.4	3584.8	3594.8
5. Net exports, official	-90.4	-88.7	-100.2	-71.8	-101.1	-119.8	-134.0
6. Gross domestic purchases (4-5)	3583.0	3599.1	3615.8	3619.6	3658.5	3703.9	3728.8
7. Net exports, CIBCR (2÷10)	-61.2	-57.5	-66.5	-38.7	-63.8	-79.2	-95.6
8. Total GNP, CIBCR (6+7)	3521.8	3541.6	3549.3	3580.9	3594.7	3624.7	3633.2
Implicit Price Deflator (1982=100)							
9. Total GNP, official, (1÷4)	107.58	108.60	109.58	110.42	111.33	112.08	112.98
10. Gross domestic purchases, net exports, total GNP, CIBCR (3÷6)	106.69	107.64	108.54	109.40	110.18	110.82	111.79
11. Net exports, official (2÷5)	72.23	69.79	72.06	59.19	69.54	73.29	79.78

TABLE B., continued

	Percent Changes, Annual Rate						
	II/84 -III/84	III/84 -IV/84	IV/84 -I/85	I/85 -II/85	II/85 -III/85	III/85 -IV/85	II/84 -IV/85
In Current dollars (billions)							
1. Total GNP	6.0	4.3	6.9	4.5	5.8	4.5	5.3
2. Net exports	-	-	-	-	-	-	-
3. Gross domestic purchases (1-2)	5.5	5.3	3.6	7.4	7.5	6.4	5.9
In 1982 dollars							
4. Total GNP, official	2.1	0.6	3.7	1.1	3.0	1.2	1.9
5. Net exports, official	-	-	-	-	-	-	-
6. Gross domestic purchases (4-5)	1.8	1.9	0.4	4.4	5.1	2.7	2.7
7. Net exports, CIBCR (2÷10)	-	-	-	-	-	-	-
8. Total GNP, CIBCR (6+7)	2.3	0.9	3.6	1.5	3.4	0.9	2.1
Implicit Price Deflator (1982=100)							
9. Total GNP, official, (1÷4)	3.8	3.7	3.1	3.3	2.7	3.3	3.3
10. Gross domestic purchases, net exports, total GNP, CIBCR (3÷6)	3.4	3.4	3.2	2.9	2.3	3.5	3.2
11. Net exports, official (2÷5)	-12.8	13.7	-54.5	90.5	23.4	40.4	6.9

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover sixty-three indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, all previous expansions since 1948 (or whenever after 1948 the indicator begins), and the average of three long expansions. The three long expansions are: 1949-53, 45 months; 1961-69, 106 months; 1975-80, 58 months. The expansions that are excluded from the averages covered the following periods: 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, November 1985, which is 36 months after the November 1982 business cycle trough, all the entries for that indicator will be for 36 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

The tables pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending four years after the trough. The average recovery is also shown for each month of the five-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

To order the 100-page 1986 Supplement, send in the order form on the back cover.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 39 MONTHS AFTER THE BUSINESS CYCLE TROUGH

ACTUAL LEVELS

	Months After Business Cycle Trough	Expansions			Starting				Average	Current Expansion Starting
		OCT 1949	MAY 1954*	APR 1958*	FEB 1961	NOV 1970*	MAR 1975	JULY 1980*	(1949, 1961, 1975)	NOV 1982
I. COMPOSITE INDEXES										
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	39	7.20	-2.40	7.50	3.60	-3.30	4.70	10.10	5.17	6.30
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	39	8.90	-0.30	6.00	6.50	-2.70	5.30	12.70	6.90	4.10
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	39	9.00	-0.50	0.50	6.90	2.70	13.00	14.20	9.63	4.20
9. LEADING INDEX, GROWTH RATE	38	7.60	-1.70	10.30	7.40	-4.80	6.30	14.90	7.10	4.80
10. COINCIDENT INDEX, GROWTH RATE	33	12.80	0.00	2.40	6.80	0.90	8.70	10.40	9.43	3.30
12. RATIO, COINCIDENT TO LAGGING INDEX	38	119.60	101.00	94.00	95.90	112.30	126.90	130.60	114.13	[illegible]
14. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	36	n.a.	n.a.	4.40	6.20	4.60	4.50	7.50	[illegible]	2.90
II. OUTPUT, INCOME AND SALES										
16. REAL GNP GROWTH RATE	36	4.70	1.20	2.60	6.50	2.50	3.40	5.70	4.87	2.00
III. EMPLOYMENT AND UNEMPLOYMENT										
22. EMPLOYMENT TO POPULATION RATIO	39	58.70	57.60	55.90	56.00	58.70	59.90	58.00	58.47	60.70
27. EMPLOYMENT DIFFUSION INDEX, 186 IND.	39	90.00	25.00	59.00	71.90	73.40	82.00	79.70	81.30	58.10
28. UNEMPLOYMENT RATE: TOTAL	39	2.80	4.00	6.80	5.00	5.10	5.80	8.70	4.53	7.20
29. UNEMPLOYMENT RATE: INSURED	39	2.60	3.50	5.30	3.80	3.20	3.11	3.20	3.17	2.80
31. SHORT-DURATION UNEMPLOYMENT RATE	39	2.30	3.20	4.30	3.70	4.10	4.60	5.50	3.53	5.20
32. LAYOFF RATE	39	0.21	0.47	0.54	0.40	0.49	0.33	0.53	0.31	0.48
33. PART-TIME EMPLOYMENT RATIO	39	n.a.	n.a.	1.90	3.00	4.00	3.50	2.20	2.17	2.60
IV. INVESTMENT COMMITMENTS AND INVENTORIES										
40. INVENTORY/SALES RATIO	36	1.55	1.55	1.57	1.49	1.52	1.62	1.57	1.55	1.55
41. CH IN INVENT ON HAND & ON ORDER. BIL 72$	36	5.90	-2.50	-3.50	7.90	23.40	21.00	6.60	11.60	2.60
V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS										
42. OUTPUT PER HOUR, GROWTH RATE	36	0.80	1.70	4.30	4.70	-1.30	0.30	3.70	1.93	-0.50
43. UNIT LABOR COSTS, GROWTH RATE	36	5.30	3.50	-0.30	0.00	9.20	8.80	-0.30	4.70	4.00
44. HOURLY COMPENSATION, GROWTH RATE	36	6.00	5.40	3.60	4.50	7.90	8.90	3.30	6.47	3.50
45. REAL HOURLY COMPENSATION, GROWTH RATE	36	4.70	1.90	2.90	3.10	-1.00	2.40	0.20	3.40	0.00
46. SELLING PRICE INDEX, GROWTH RATE	36	3.60	3.60	1.00	1.00	7.80	6.20	3.10	3.60	2.70
47. GROWTH IN PRICES MINUS GROWTH IN COSTS	36	-1.70	0.10	1.30	1.00	-1.00	-2.60	3.40	-1.10	-1.30
48. CORPORATE PROFIT MARGIN	33	99.50	98.50	96.60	100.20	97.10	99.60	97.80	99.77	98.70
49. PRICE/LABOR COST RATIO	36	99.30	98.10	97.00	100.60	97.50	98.50	98.20	99.47	98.00
53. CONSUMER PRICE INDEX, GROWTH RATE	38	1.10	3.50	0.60	1.30	9.90	7.80	3.60	3.40	4.00
55. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	39	-16.70	-7.40	1.70	6.20	60.90	11.10	22.00	0.20	-4.50
56. IMPORT PRICES, GROWTH RATE	37	-6.70	0.60	-2.00	3.20	29.90	10.40	-6.40	2.30	1.40
57. ANTICIPATED SELLING PRICES (D&B SURVEY)	37	n.a.	63.00	56.00	59.00	87.00	88.00	70.00	49.00	63.00
VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES										
58. BUSINESS & CONSUMER DEBT, GROWTH RATE	38	16.50	9.10	6.90	12.70	12.70	16.50	2.20	15.23	9.10
59. FEDERAL DEBT, GROWTH RATE	39	2.30	-0.90	3.20	1.90	0.30	11.60	21.10	5.27	16.80
60. TOTAL DEBT, GROWTH RATE	38	7.10	3.50	4.40	8.00	9.30	14.00	7.90	9.70	12.00
61. MONEY SUPPLY (M1), GROWTH RATE	39	3.20	0.50	2.10	3.30	5.70	8.70	9.30	5.07	10.10
62. MONEY SUPPLY (M2), GROWTH RATE	39	4.30	2.90	7.00	7.20	6.60	7.80	10.10	6.43	5.60
63. TREASURY BILL RATE (3-MONTH)	39	2.00	1.40	2.20	3.50	7.10	6.70	8.60	4.07	7.10
64. NEW CORPORATE BOND YIELD (AA)	39	3.20	4.80	4.80	4.50	8.20	9.10	12.50	5.60	9.80

*Figures not included to avoid overlap with recessions beginning August, 1957, April 1960, November 1973 and July 1981.

TABLE 2

RECESSION-RECOVERY STATUS UP TO 39 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLE TROUGH

		Months After Business Cycle Trough	Expansions Starting							Average	Current Expansion Starting NOV 1982	Last Month or Quarter Available
			OCT 1949	MAY 1954*	APR 1958*	FEB 1961	NOV 1970*	MAR 1975	JULY 1980*	(1949, 1961, 1975)		
I.	COMPOSITE INDEXES											
1.	BUSINESS WEEK LEADING INDEX (CIBCR)	39	23.8	8.3	14.7	22.3	23.8	26.4	14.8	24.2	26.7	February
2.	LEADING EMPLOYMENT INDEX (CIBCR)	39	29.9	15.7	19.3	22.7	15.7	23.9	16.5	25.5	23.1	February
3.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	39	39.7	18.2	12.6	19.8	20.7	33.4	4.3	31.0	29.4	February
4.	LEADING INDEX (BCD)	38	16.3	13.8	21.1	24.6	21.9	34.6	18.4	25.2	23.9	January
5.	COINCIDENT INDEX (BCD)	38	35.8	17.2	12.8	19.9	20.6	25.9	1.6	27.2	23.0	January
11.	LAGGING INDEX (BCD)	38	35.1	24.7	9.7	9.7	1.9	-4.1	-10.5	13.6	11.1	January
13.	EIGHT-COUNTRY LEADING INDEX (CIBCR)	36	n.a.	n.a.	26.2	10.5	23.3	16.8	6.9	9.1	19.4	November
II.	OUTPUT, INCOME AND SALES											
15.	REAL GNP	36	27.5	10.8	11.7	16.6	14.5	14.3	4.6	19.5	13.8	Q4
17.	INDUSTRIAL PRODUCTION INDEX	38	41.8	22.0	20.6	28.1	21.2	27.9	7.9	32.6	26.0	January
18.	REAL PERSONAL INCOME	37	21.4	16.3	11.2	14.2	15.8	14.8	5.4	16.8	11.5	December
19.	REAL CONSUMER EXPENDITURES	37	12.5	12.8	11.4	14.0	11.8	16.2	8.6	14.2	13.5	December
20.	REAL RETAIL SALES	38	13.2	16.0	10.1	14.7	16.8	20.0	9.3	16.0	18.9	January
III.	EMPLOYMENT AND UNEMPLOYMENT											
21.	TOTAL EMPLOYMENT	39	8.7	6.3	4.4	6.0	9.7	12.7	3.4	9.1	9.4	February
23.	NONFARM EMPLOYMENT	39	15.8	8.3	6.2	8.5	11.0	13.5	1.8	12.6	12.4	February
24.	NONFARM EMPLOYEE-HOURS	39	17.1	7.8	6.9	9.0	10.4	13.5	2.1	13.2	13.1	February
25.	EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES	39	23.0	6.0	2.9	6.6	10.4	13.9	-5.5	14.5	9.9	February
26.	EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	39	11.0	9.8	8.2	9.5	11.3	13.3	4.7	11.3	13.3	February
30.	INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	39	30.0	-25.0	-18.1	-34.6	-0.5	-37.5	-27.0	-7.4	-34.8	February
34.	AVERAGE WORKWEEK, MANUFACTURING	39	4.4	0.8	3.4	3.6	2.3	3.9	3.7	4.0	4.1	February
35.	OVERTIME HOURS, MANUFACTURING	39	n.a.	n.a.	38.5	47.6	31.2	50.0	32.0	32.5	47.8	February
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
36.	NEW PRIVATE HOUSING STARTS	33	-12.3	-17.7	20.1	16.7	-15.8	114.5	31.5	39.6	62.8	January
37.	NEW PRIVATE HOUSING PERMITS	38	-21.5	-22.2	9.6	24.6	-18.8	115.5	27.0	39.5	48.5	January
38.	CONTRACT & ORDERS, PLANT & EQUIPMENT ('82$)	38	56.9	29.2	23.4	47.2	53.0	47.5	1.7	30.5	17.0	December
39.	NEW CAPITAL APPROPRIATIONS, MFG.	33	n.a.	71.8	21.4	58.3	80.9	24.3	-20.2	47.0	9.8	Q3
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
50.	BUSINESS FAILURES, LIABILITIES $100,000+	39	0.0	14.0	38.5	-3.3	0.0	-40.5	108.9	-14.6	-0.8	February
51.	LEADING INDEX OF INFLATION (CIBCR)	38	17.6	8.4	4.6	7.5	29.3	18.8	-9.7	14.6	12.4	January
52.	CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	38	12.6	4.8	3.2	3.7	18.2	22.1	21.4	12.8	12.1	January
54.	INDUSTRIAL MATERIALS PRICE INDEX	39	9.6	6.3	11.6	-2.4	125.6	22.3	-6.9	9.8	7.6	February
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
65.	STOCK PRICE INDEX (S&P 500)	39	65.4	61.2	53.2	30.2	8.4	17.9	40.5	37.8	60.5	February

*Figures not included to avoid overlap with recessions beginning August 1957, April 1960, November 1973 and July 1981.

TABLE 3

RECESSION-RECOVERY STATUS UP TO 39 MONTHS FROM THE BUSINESS CYCLE TROUGH

DIFFERENCE FROM THE PRECEDING BUSINESS CYCLE TROUGH

	Months After Business Cycle Trough	Expansions Starting							Average	Current Expansion Starting
		OCT 1949	MAY 1954*	APR 1958*	FEB 1961	NOV 1970*	MAR 1975	JULY 1980*	(1949, 1961, 1975)	NOV 1982
I. COMPOSITE INDEXES										
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	39	2.70	-11.20	1.60	-3.10	-8.40	10.00	19.60	3.20	1.50
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	39	10.20	4.00	14.90	8.70	2.10	13.10	18.40	11.33	2.70
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	39	22.90	13.40	19.00	15.00	9.80	29.70	22.40	22.53	12.00
9. LEADING INDEX, GROWTH RATE	38	-2.30	-3.80	13.40	6.10	-4.00	19.80	20.50	7.87	3.10
10. COINCIDENT INDEX, GROWTH RATE	38	20.00	9.40	17.00	13.50	6.50	23.80	19.20	19.10	10.30
12. RATIO, COINCIDENT TO LAGGING INDEX	38	0.60	-6.50	2.50	8.20	17.40	30.20	15.60	13.00	11.90
16. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	36	n.a.	n.a.	6.00	1.30	6.90	13.30	9.00	5.53	2.20
II. OUTPUT, INCOME AND SALES										
16. REAL GNP GROWTH RATE	36	6.30	4.90	5.20	5.90	2.60	8.40	7.70	6.87	3.10
III. EMPLOYMENT AND UNEMPLOYMENT										
22. EMPLOYMENT TO POPULATION RATIO	39	3.20	1.30	-0.10	0.50	1.20	3.40	-0.80	2.37	3.00
27. EMPLOYMENT DIFFUSION INDEX, 186 IND.	39	61.10	10.00	45.10	51.60	47.70	67.90	52.80	60.20	36.90
28. UNEMPLOYMENT RATE: TOTAL	39	-4.00	-1.60	-0.20	-1.60	-0.60	-2.50	1.10	-2.70	-3.30
29. UNEMPLOYMENT RATE: INSURED	39	-4.80	-1.90	-1.60	-2.50	-0.90	-3.20	-1.20	-3.50	-2.20
31. SHORT-DURATION UNEMPLOYMENT RATE	39	-2.90	-1.10	-0.60	-1.00	-0.50	-1.40	-0.20	-1.77	-1.30
32. LAYOFF RATE	39	-4.20	-0.90	-2.30	-2.40	-0.70	-5.20	-2.50	-3.93	-4.20
33. PART-TIME EMPLOYMENT RATIO	39	n.a.	n.a.	0.60	1.30	0.10	0.70	-0.80	0.67	0.70
IV. INVESTMENT COMMITMENTS AND INVENTORIES										
40. INVENTORY/SALES RATIO	36	0.02	-0.07	-0.07	-0.09	-0.20	-0.16	-0.14	-0.08	-0.21
41. CH IN INVENT ON HAND & ON ORDER, BIL 72$	36	4.80	13.30	13.70	18.80	24.30	49.40	19.40	24.33	21.50
V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS										
42. OUTPUT PER HOUR, GROWTH RATE	36	-0.10	0.90	1.10	2.90	-2.90	0.80	3.20	1.20	-2.00
43. UNIT LABOR COSTS, GROWTH RATE	36	5.30	2.00	-1.00	-1.00	4.70	-2.90	-10.90	0.47	-1.00
44. HOURLY COMPENSATION, GROWTH RATE	36	5.20	3.00	0.00	1.80	2.00	-2.20	-7.60	1.60	-3.00
45. REAL HOURLY COMPENSATION, GROWTH RATE	36	1.90	-0.30	2.40	1.50	-1.70	2.20	1.20	1.87	-2.30
46. SELLING PRICE INDEX, GROWTH RATE	36	4.50	1.60	0.30	1.30	3.40	-7.00	-6.20	-0.40	-1.60
47. GROWTH IN PRICES MINUS GROWTH IN COSTS	36	-0.80	-0.40	1.30	2.30	-1.30	-4.10	4.70	-0.87	-0.60
48. CORPORATE PROFIT MARGIN	33	0.80	0.60	-0.90	3.60	-0.20	2.40	2.80	2.27	3.20
49. PRICE/LABOR COST RATIO	36	0.60	0.20	0.36	4.00	0.20	1.30	2.40	1.97	2.50
53. CONSUMER PRICE INDEX, GROWTH RATE	38	2.90	3.10	-3.10	-0.10	4.60	-1.90	-9.00	0.30	-0.10
55. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	39	-0.60	-13.10	15.50	8.70	79.50	38.90	31.00	15.67	13.40
56. IMPORT PRICES GROWTH RATE	37	-1.40	-0.30	3.80	5.00	26.60	-1.40	-27.90	0.73	3.20
57. ANTICIPATED SELLING PRICES (D&B SURVEY)	37	n.a.	16.70	0.30	4.00	8.30	12.30	-16.00	5.43	-4.70
VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES										
58. BUSINESS & CONSUMER DEBT, GROWTH RATE	38	13.10	2.90	3.40	5.10	7.90	10.50	-3.40	9.57	9.30
59. FEDERAL DEBT, GROWTH RATE	39	1.00	-1.30	2.10	2.40	-4.50	0.30	10.80	1.23	-3.00
60. TOTAL DEBT, GROWTH RATE	38	5.20	0.90	2.20	4.20	4.70	7.60	1.20	5.67	7.10
61. MONEY SUPPLY (M1), GROWTH RATE	39	3.90	-0.50	1.50	1.70	0.00	5.00	4.20	3.53	0.20
62. MONEY SUPPLY (M2), GROWTH RATE	39	4.60	-0.30	1.80	0.70	-1.30	0.30	1.80	1.87	-4.20
63. TREASURY BILL RATE (3-MONTH)	39	0.90	2.60	1.10	1.10	1.80	1.20	0.60	2.60	-0.80
64. NEW CORPORATE BOND YIELD (AA)	39	0.70	1.90	1.10	0.00	-0.50	-0.20	0.90	0.17	-2.40

*Figures not included to avoid overlap with recessions beginning August 1957, April 1960, November 1973 and July 1981.

RECESSION-RECOVERY PATTERN CHARTS

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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

RECESSION-RECOVERY PATTERNS

―――――――― Current recovery to date (business cycle trough: November 1982 or IV Q 1982)

-+-+-+-+-+- Average of three long recoveries (1949-53, 1961-69, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average previous recovery developed beyond the present point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background. One can see easily where new figures or forecasts would be placed.

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side of most charts is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the trough standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the three cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, ratios or changes (e.g., the unemployment rate or GNP growth rate, employment to population ratio, or change in inventories), the charts show actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle. This scale shows how the averages for previous recoveries translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference.

The averages, which extend out to four years after the trough, include three recoveries: 1949-53, 1961-69 and 1975-80. The 1954-57, 1958-60, 1970-73 and 1980-81 recoveries, which lasted 39, 24, 36 and 12 months respectively, are excluded to avoid including the subsequent recessions in the averages.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in the preceding three tables.

COMPOSITE INDEXES

CHART 1
BUSINESS WEEK LEADING INDEX (CIBCR)

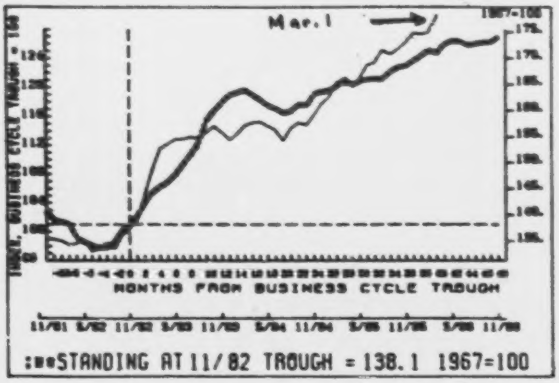


CHART 2
·LEADING EMPLOYMENT INDEX (CIBCR)

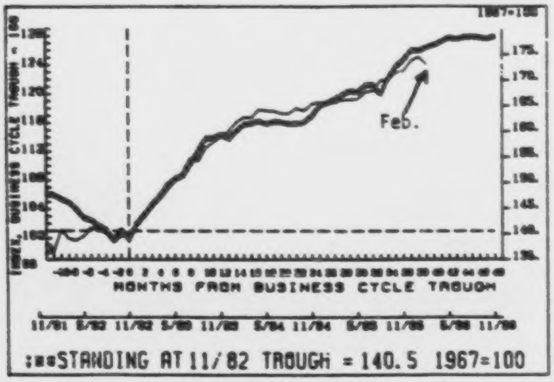


CHART 3
COINCIDENT EMPLOYMENT INDEX (CIBCR)

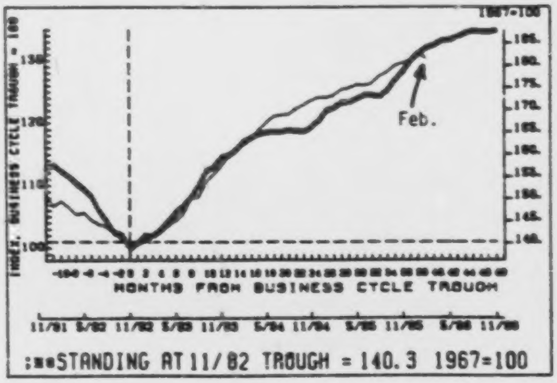


CHART 4
LEADING INDEX (BCD)

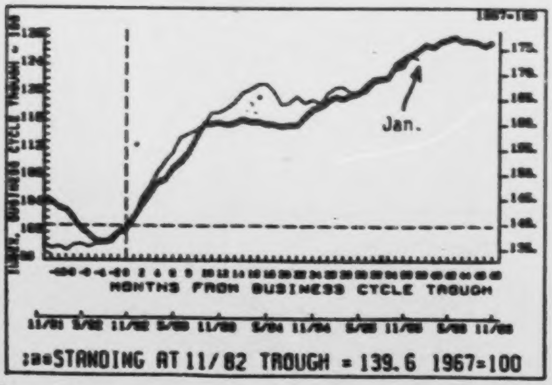
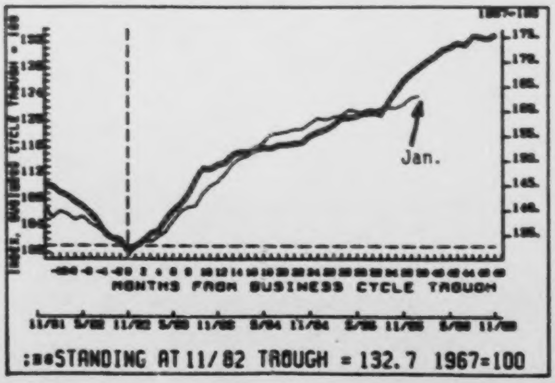


CHART 5
COINCIDENT INDEX (BCD)



COMPOSITE INDEX GROWTH RATES

CHART 6
BUSINESS WEEK LEADING INDEX, GROWTH RATE (CIBCR)

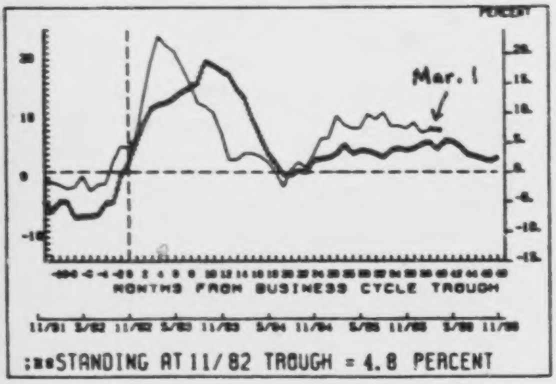


CHART 7
LEADING EMPLOYMENT INDEX, GROWTH RATE (CIBCR)

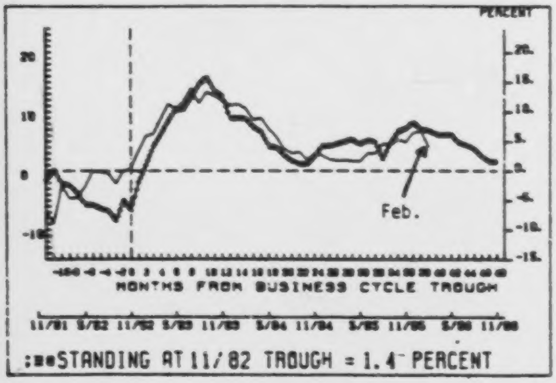


CHART 8
COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)

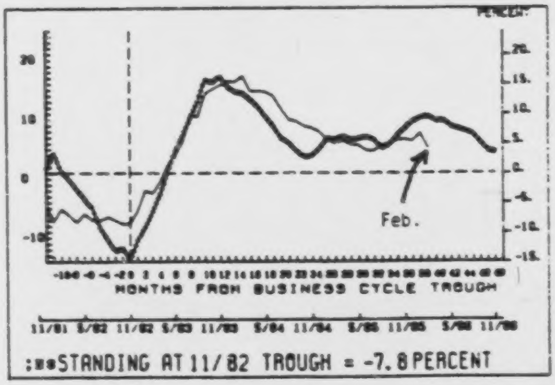


CHART 9
LEADING INDEX, GROWTH RATE (BCD)

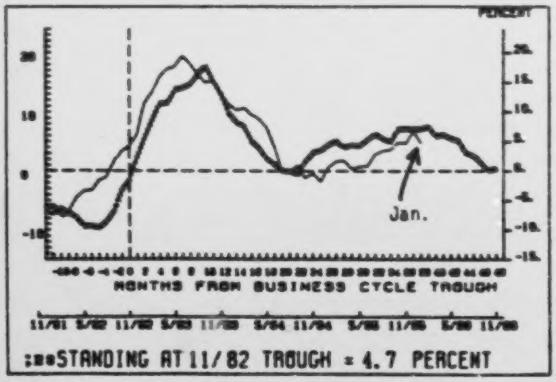
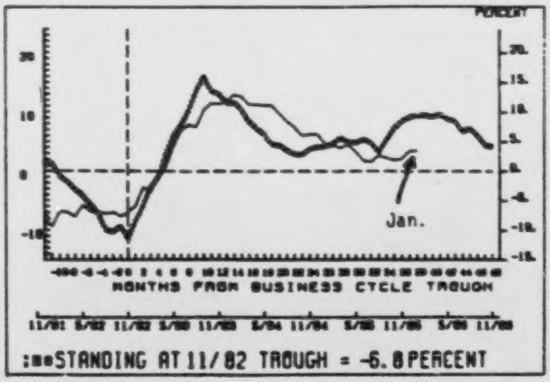
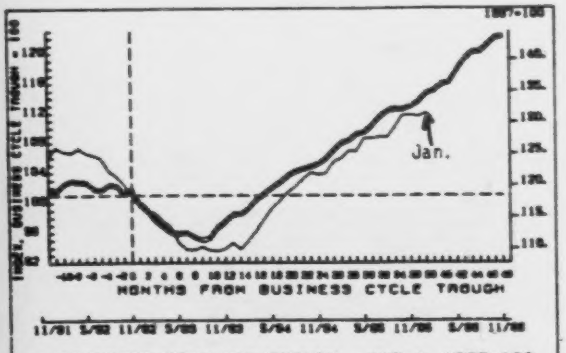


CHART 10
COINCIDENT INDEX, GROWTH RATE (BCD)



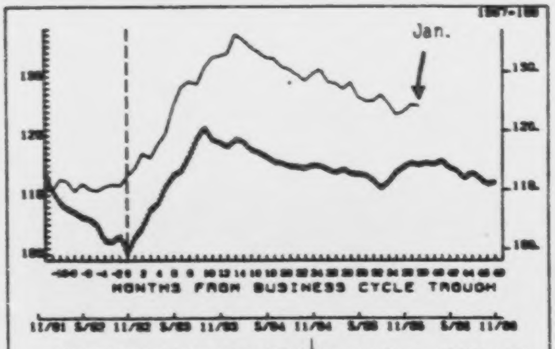
OTHER COMPOSITE INDEXES

CHART 11
LAGGING INDEX (BCD)



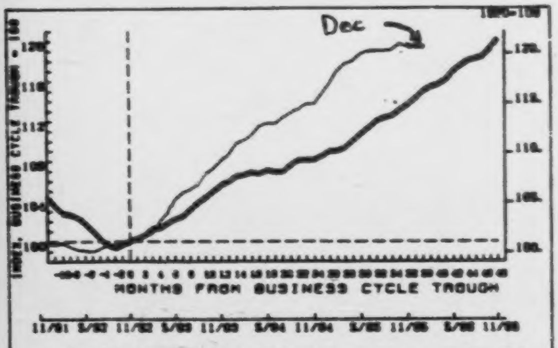
:**STANDING AT 11/82 TROUGH = 118.4 1967=100

CHART 12
RATIO, COINCIDENT TO LAGGING INDEX (BCD)



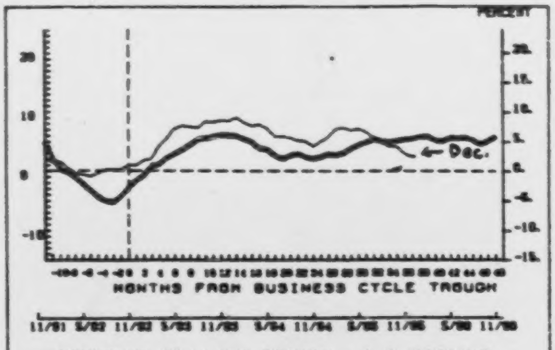
:**STANDING AT 11/82 TROUGH = 112.1 1967=100

CHART 13
EIGHT-COUNTRY LEADING INDEX (CIBCR)*



:**STANDING AT 11/82 TROUGH = 101.1 1980=100

CHART 14
EIGHT-COUNTRY LEADING INDEX,
GROWTH RATE (CIBCR)*



:**STANDING AT 11/82 TROUGH = 0.7 PERCENT

*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia and Taiwan

OUTPUT, INCOME AND SALES

CHART 15
REAL GNP

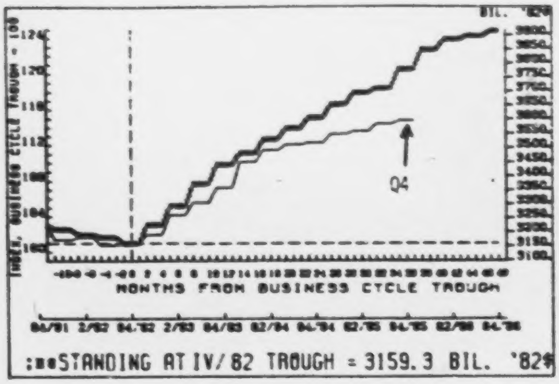


CHART 16
REAL GNP, GROWTH RATE

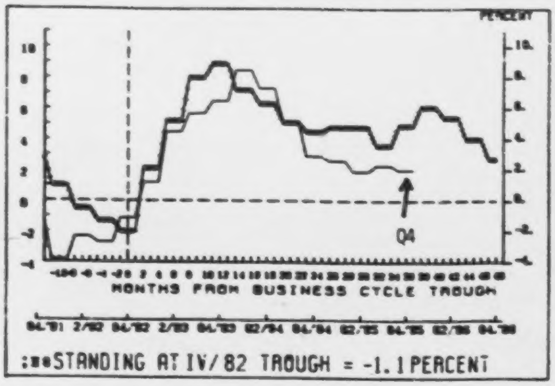


CHART 17
INDUSTRIAL PRODUCTION INDEX

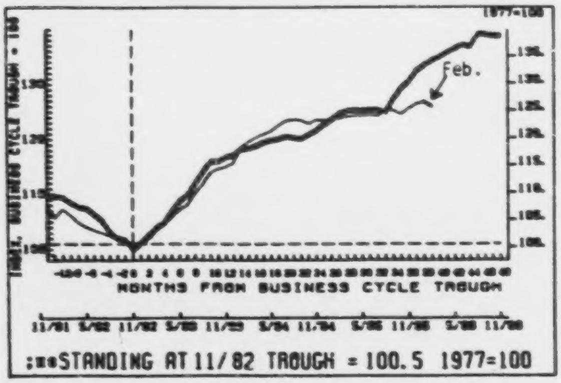


CHART 18
REAL PERSONAL INCOME

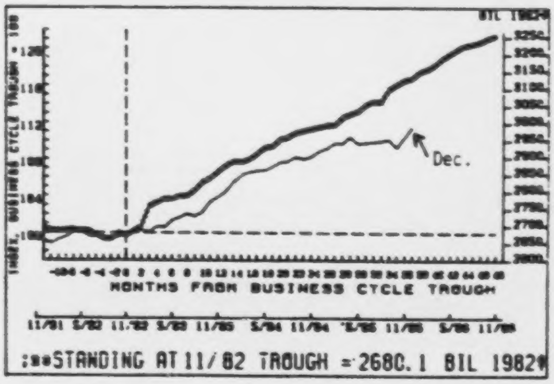


CHART 19
REAL CONSUMER EXPENDITURES

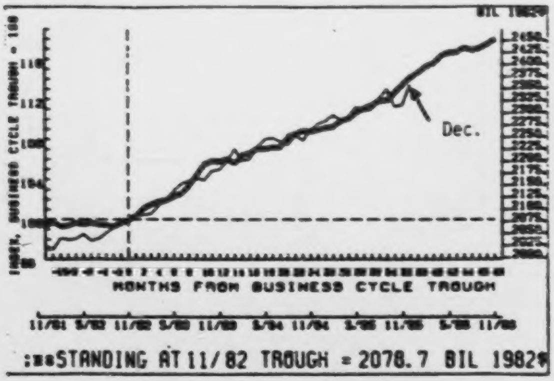
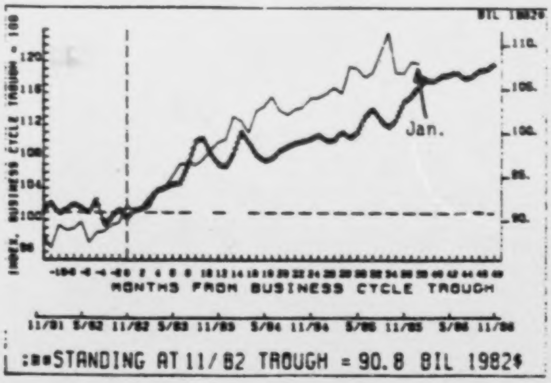


CHART 20
REAL RETAIL SALES



EMPLOYMENT

CHART 21
TOTAL EMPLOYMENT

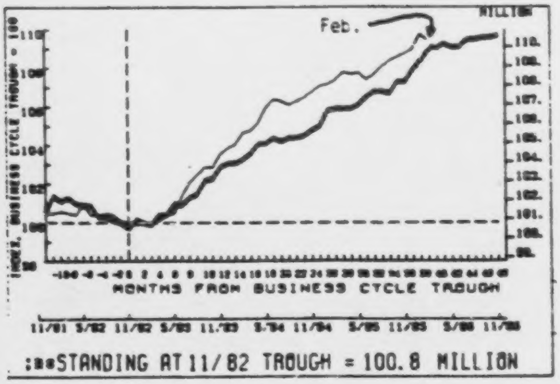


CHART 22
EMPLOYMENT TO POPULATION RATIO

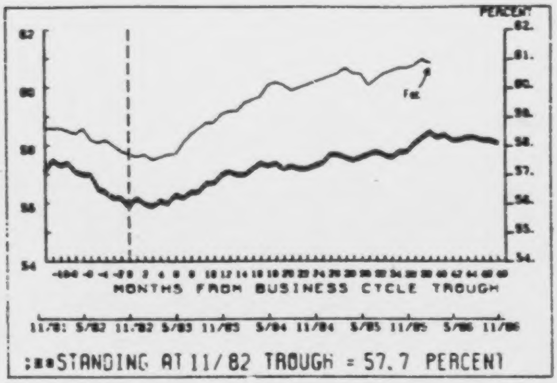


CHART 23
NONFARM EMPLOYMENT

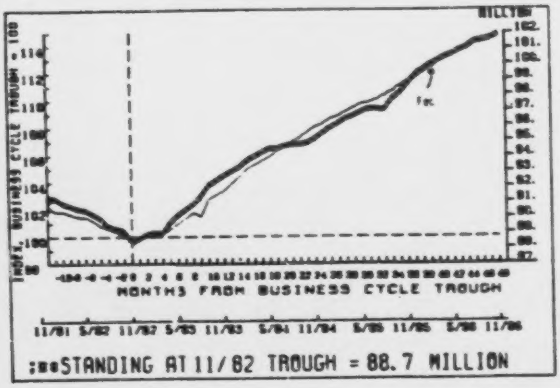


CHART 24
NONFARM EMPLOYEE HOURS

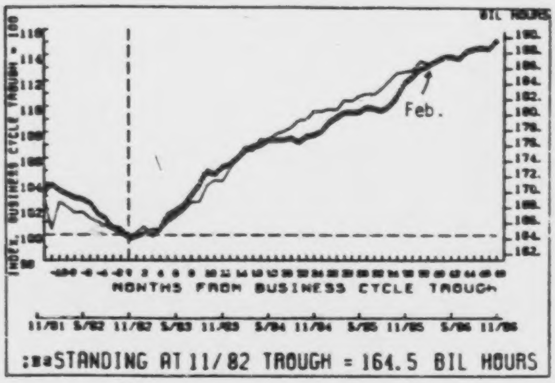


CHART 25
EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES

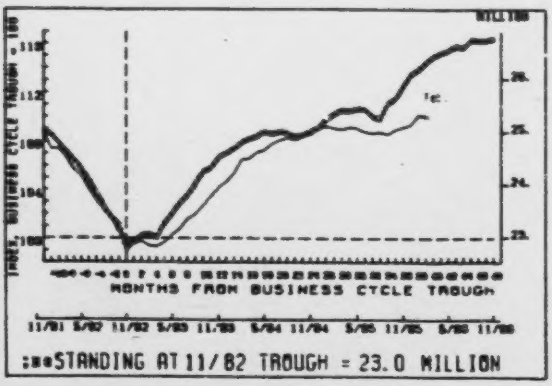


CHART 26
EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES

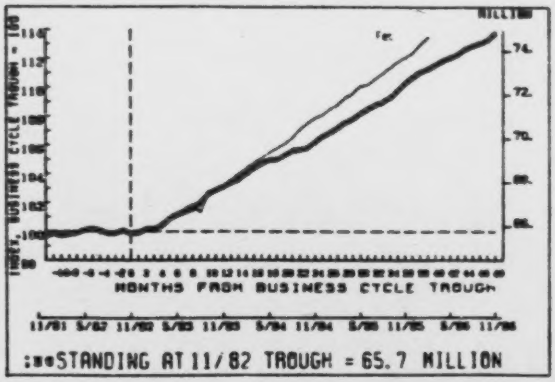


CHART 27
EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES

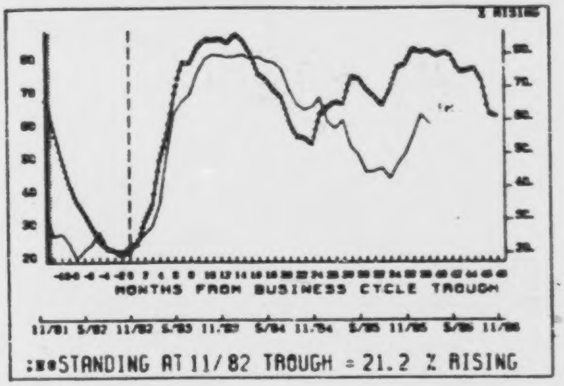


CHART 28
UNEMPLOYMENT RATE: TOTAL

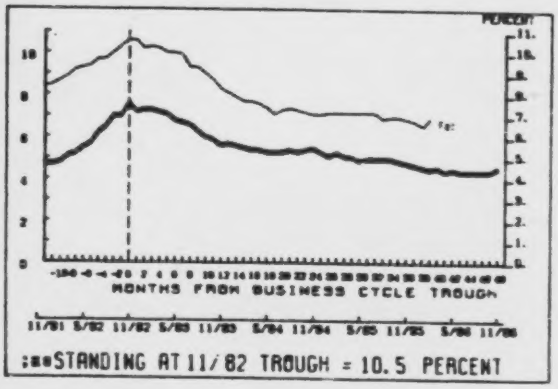


CHART 29
UNEMPLOYMENT RATE: INSURED

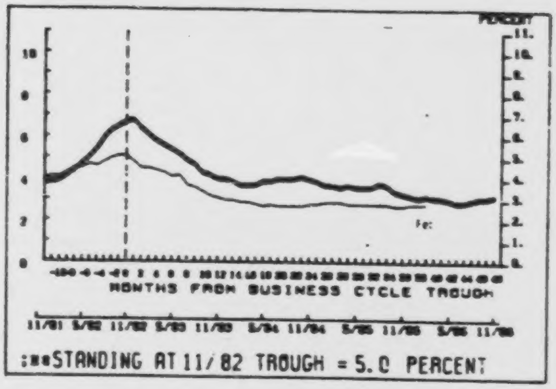


CHART 30
INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

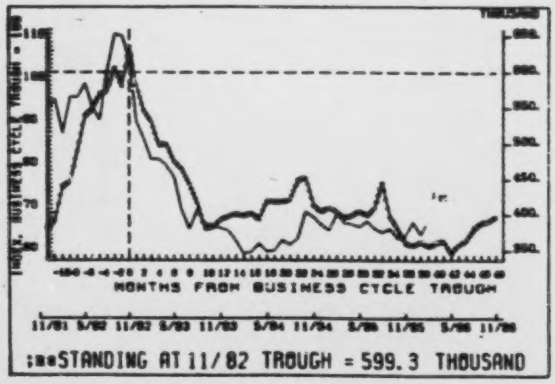
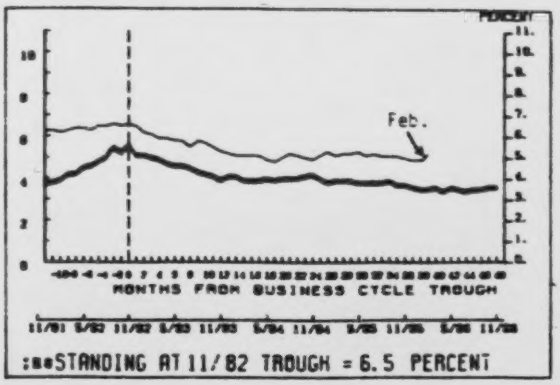


CHART 31
SHORT-DURATION UMEMPLOYMENT RATE
(UNDER 15 WEEKS)



OTHER LEADING EMPLOYMENT INDICATORS

CHART 32
LAYOFF RATE

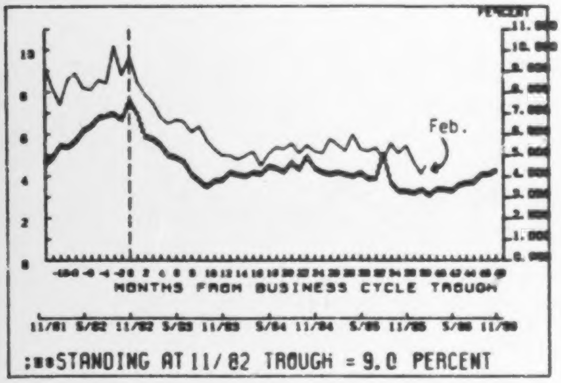


CHART 33
VOLUNTARY-INVOLUNTARY
PART-TIME EMPLOYMENT RATIO

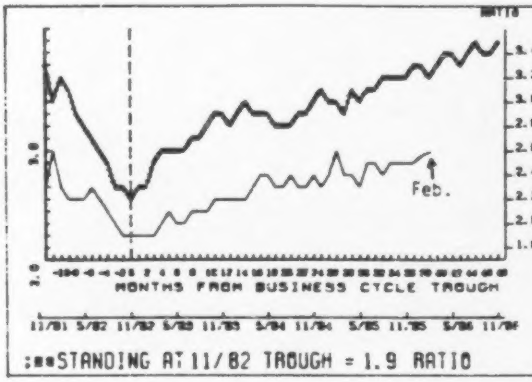


CHART 34
AVERAGE WORKWEEK, MANUFACTURING

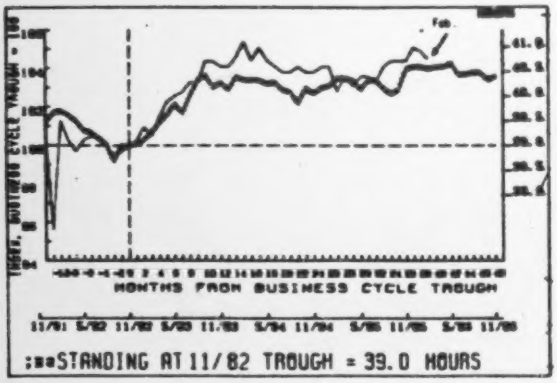
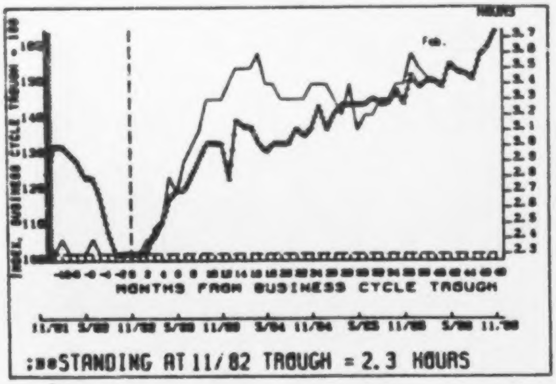


CHART 35
OVERTIME HOURS, MANUFACTURING



INVESTMENT COMMITMENTS AND INVENTORIES

CHART 36
NEW PRIVATE HOUSING STARTS

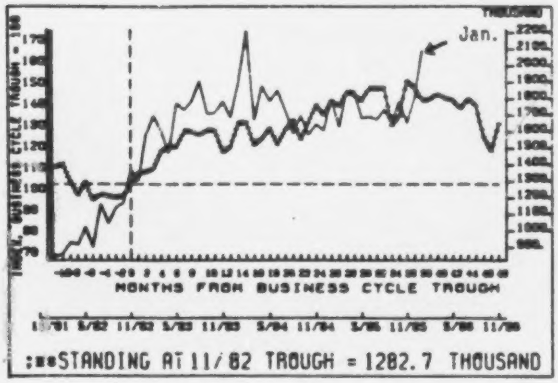


CHART 37
NEW PRIVATE HOUSING PERMITS

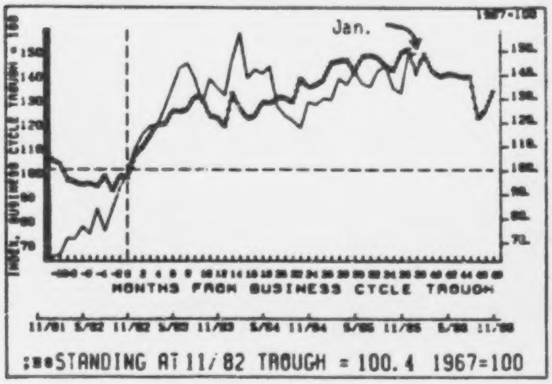


CHART 38
CONTRACTS & ORDERS, PLANT & EQUIPMENT

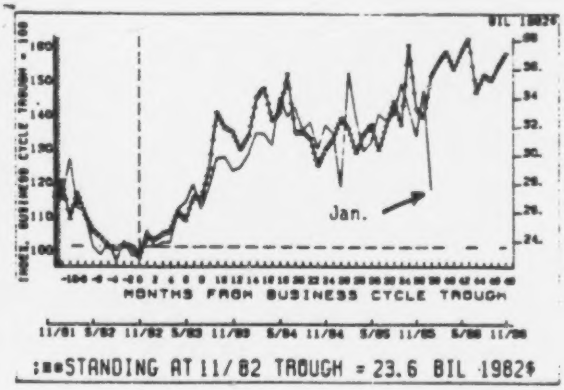


CHART 39
NEW CAPITAL APPROPRIATIONS, MFG.

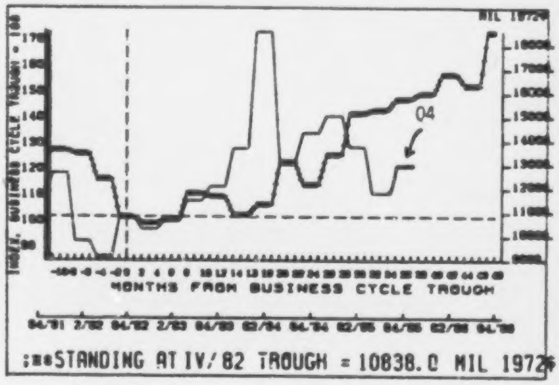


CHART 40
INVENTORY/SALES RATIO, MFG. AND TRADE

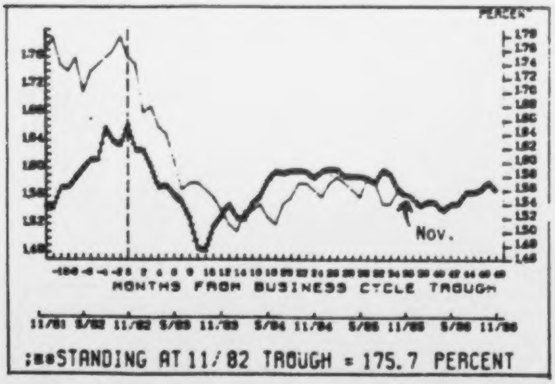
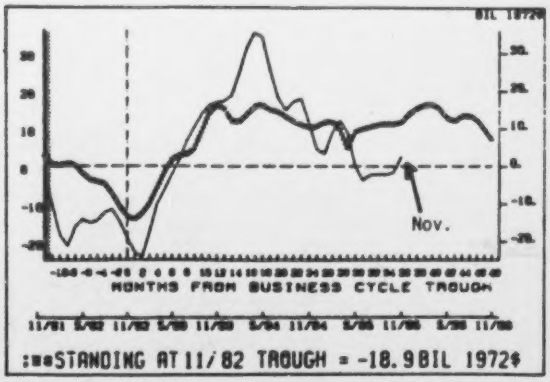


CHART 41
CHANGE IN INVENTORIES ON HAND & ON ORDER



PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

CHART 42
OUTPUT PER HOUR, GROWTH RATE

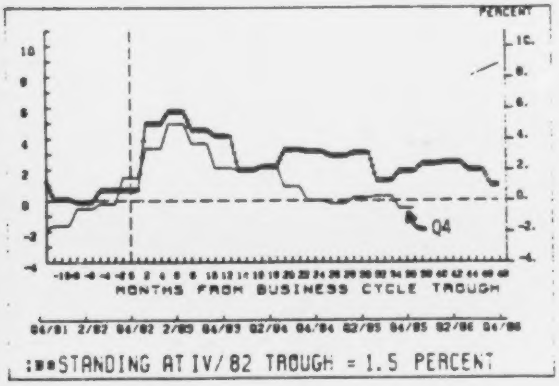


CHART 43
UNIT LABOR COSTS, GROWTH RATE

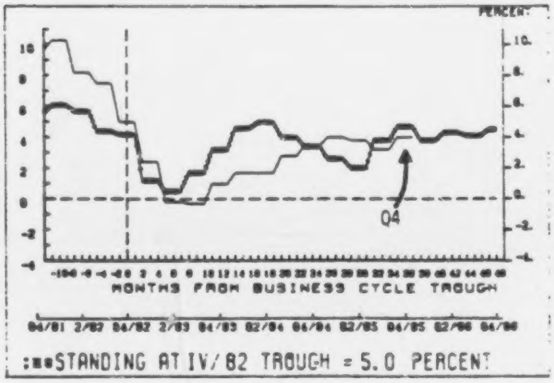


CHART 44
HOURLY COMPENSATION, GROWTH RATE

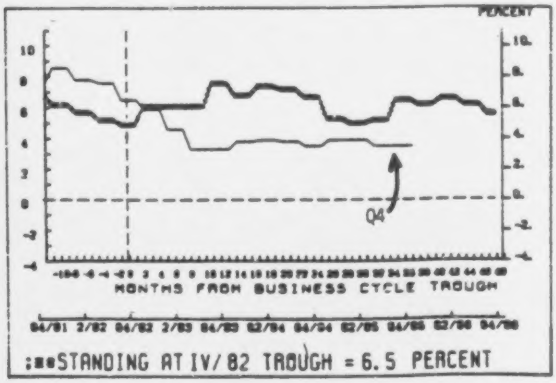


CHART 45
REAL HOURLY COMPENSATION, GROWTH RATE

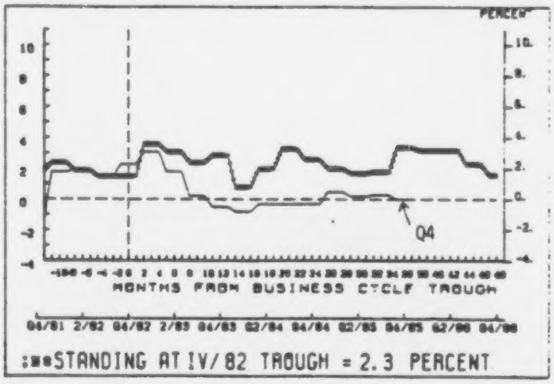


CHART 46
SELLING PRICE INDEX, GROWTH RATE

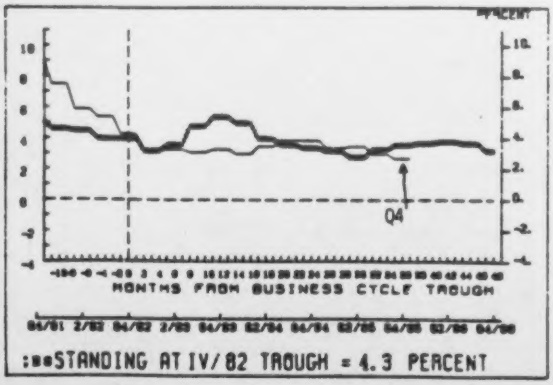
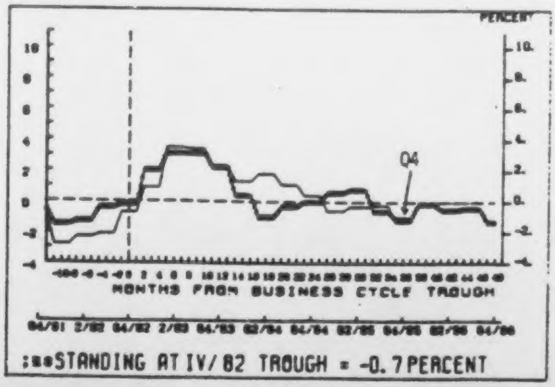
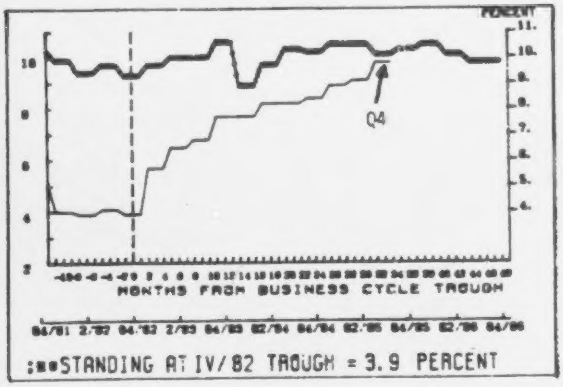


CHART 47
GROWTH RATE IN PRICES MINUS GROWTH RATE IN UNIT LABOR COSTS



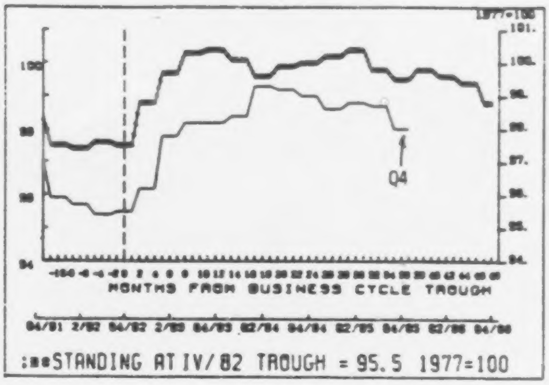
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

CHART 48
CORPORATE PROFIT MARGIN



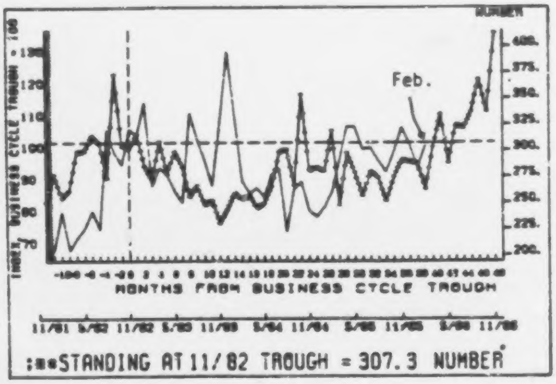
:■●STANDING AT IV/82 TROUGH = 3.9 PERCENT

CHART 49
PRICE/LABOR COST RATIO



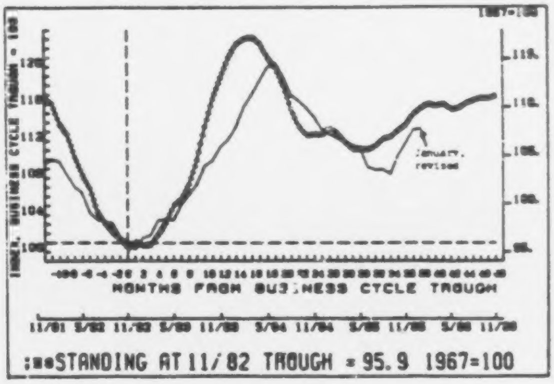
:■●STANDING AT IV/82 TROUGH = 95.5 1977=100

CHART 50
BUSINESS FAILURES, LIABILITIES OVER $100,000



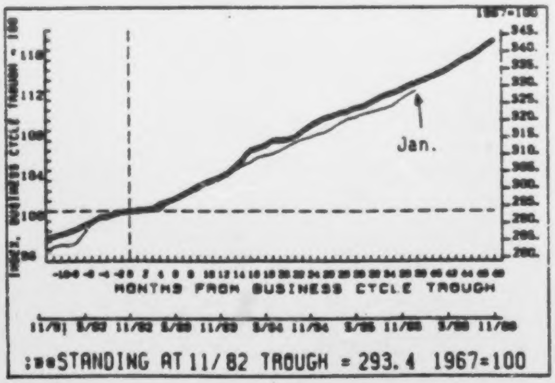
:■●STANDING AT 11/82 TROUGH = 307.3 NUMBER

CHART 51
LEADING INDEX OF INFLATION (CIBCR)



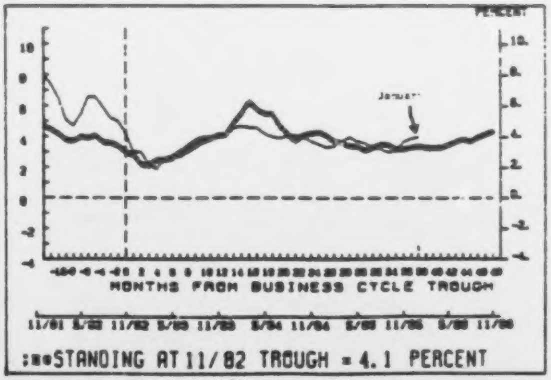
:■●STANDING AT 11/82 TROUGH = 95.9 1967=100

CHART 52
CONSUMER PRICE INDEX



:■●STANDING AT 11/82 TROUGH = 293.4 1967=100

CHART 53
CONSUMER PRICE INDEX, GROWTH RATE



:■●STANDING AT 11/82 TROUGH = 4.1 PERCENT

CHART 54
INDUSTRIAL MATERIALS PRICE INDEX, JOURNAL OF COMMERCE

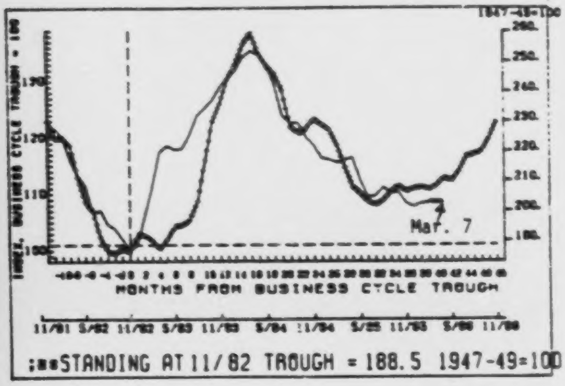


CHART 55
INDUSTRIAL MATERIALS PRICE INDEX GROWTH RATE

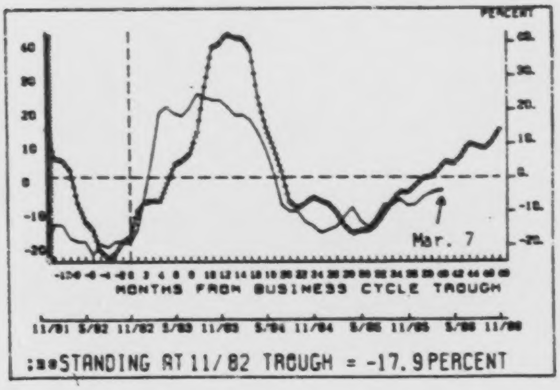


CHART 56
IMPORT PRICES RATE OF CHANGE

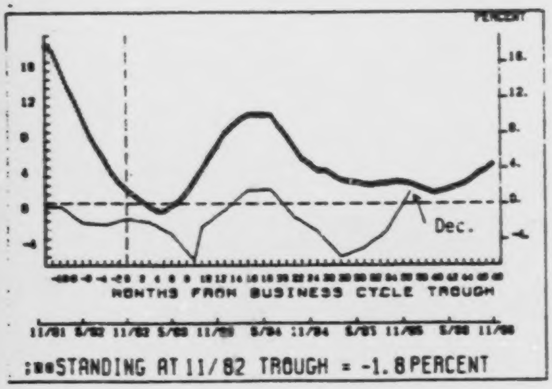
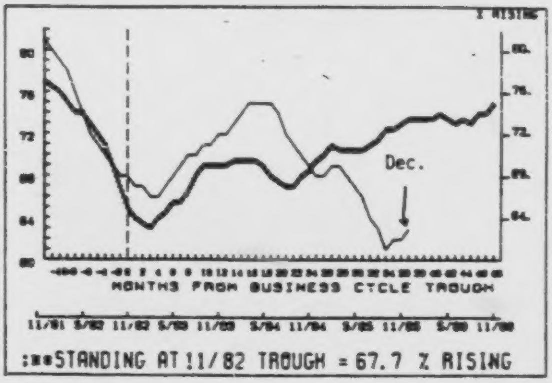


CHART 57
DUN & BRADSTREET SURVEY OF BUSINESSMEN'S ANTICIPATED SELLING PRICES



MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

CHART 58
BUSINESS & CONSUMER DEBT, GROWTH RATE

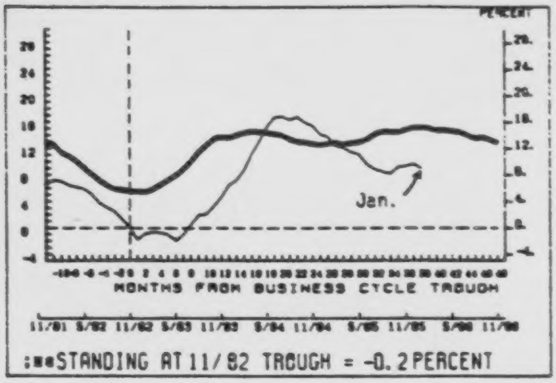


CHART 59
FEDERAL DEBT, GROWTH RATE

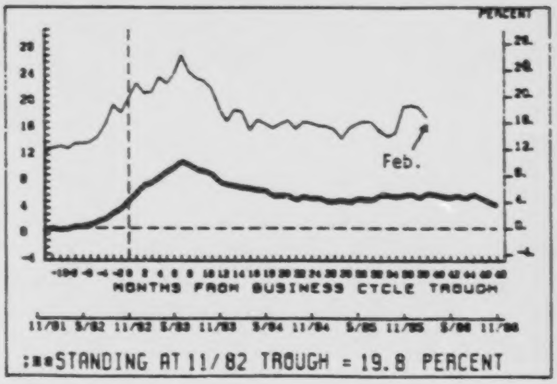


CHART 60
TOTAL DEBT, GROWTH RATE

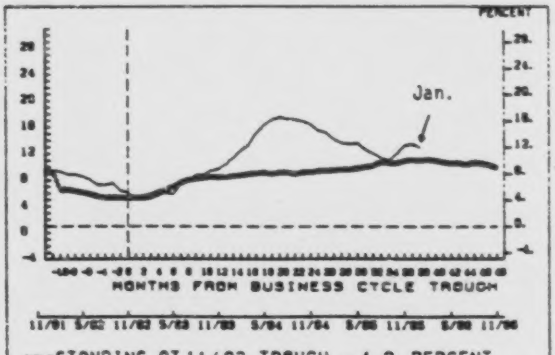


CHART 61
MONEY SUPPLY (M1), GROWTH RATE

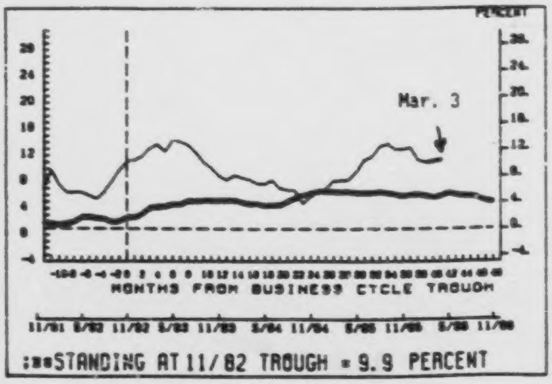
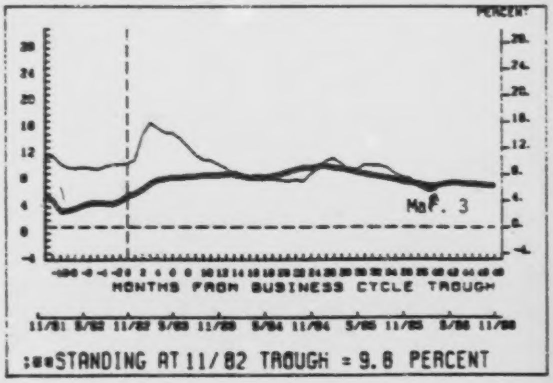


CHART 62
MONEY SUPPLY (M2), GROWTH RATE



MONEY, CREDIT, INTEREST RATES AND STOCK PRICES, cont.

CHART 63
TREASURY BILL RATE (3-MONTH)

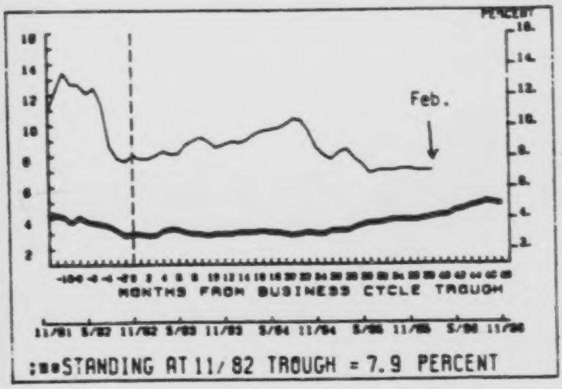


CHART 64
NEW CORPORATE BOND YIELD (AA)

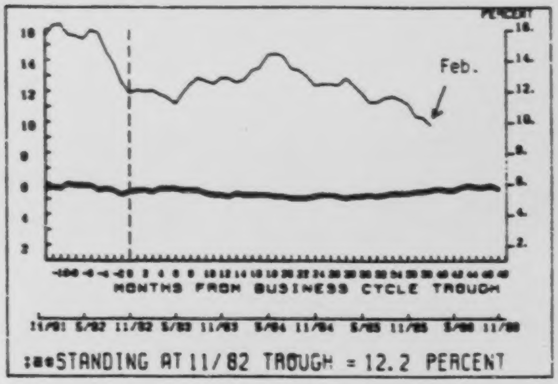
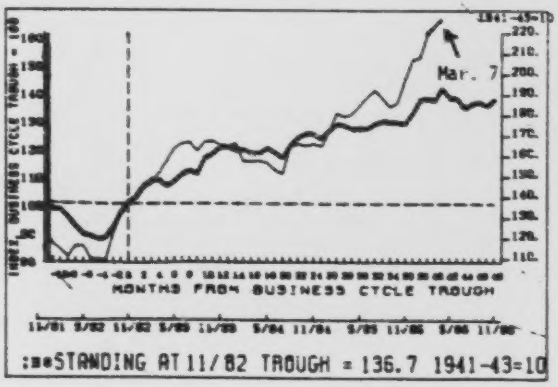


CHART 65
COMMON STOCK PRICE INDEX (S&P 500)



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The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1985 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH

A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 8 No. 2
April 1986

Summary

The leading indicators suggest that the business cycle expansion will continue and indeed accelerate. But conflicting movements in real GNP and other measures of economic performance in recent months make it uncertain whether the faster pace is already here or is yet to come. Changes in the trade balance have contributed to this uncertainty, together with the sharp drop in oil prices and in the dollar exchange rate. One of the reassuring factors is the continued decline in interest rates. A review of the long history of the connection between interest rates and the business cycle suggests that the current expansion is here to stay at least through 1987. Another reassuring factor is the growth in employment in the service industries, which has been a bigger supporting element in the current expansion than in any of the three preceding expansions of comparable length.

The Current Scene: Expansion Prevails, But ...

It has been getting more and more difficult to describe the current economic situation, much less the outlook, because so many cross-currents have been developing. Real GNP moved up fairly rapidly in the first quarter, but this was due to an improvement in the trade deficit -- the rest of GNP sagged. Industrial production was weak in February and March, and retail sales has not shown much growth since last fall. Nonfarm employment continued to grow at a reasonable pace, but unemployment moved to higher levels (Chart A).

Among the leading indexes the growth rates look generally more promising. In part, this is due to the buoyant stock market and the related decline in interest rates, which are shown

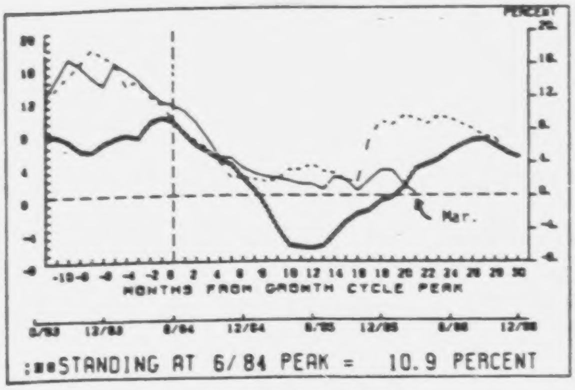
CHART A.
CURRENT SLOWDOWN COMPARED WITH THREE GROWTH RECESSIONS AND SEVEN REAL RECESSIONS

——— Current slowdown

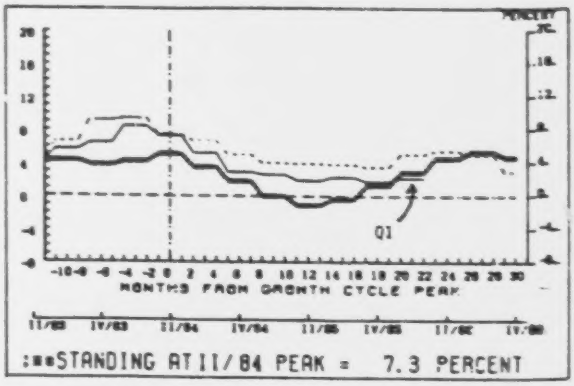
- - - - Average, three growth recessions (1951, 1962, 1966)

━━━ Average, seven real recessions (1948, 1953, 1957, 1960, 1969, 1973, 1980)

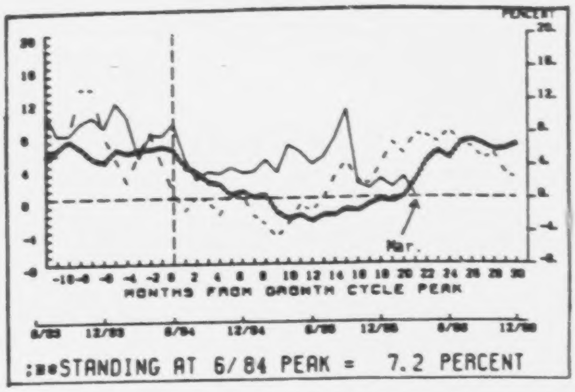
INDUSTRIAL PRODUCTION,
GROWTH RATE



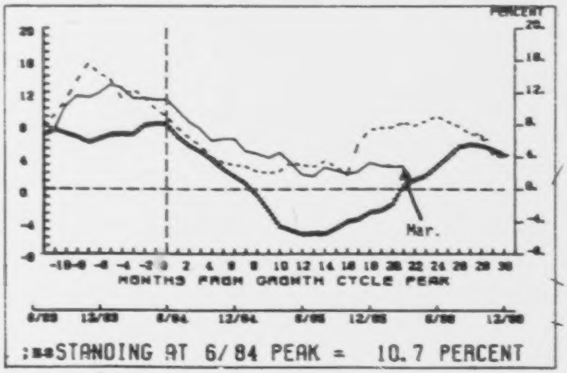
REAL GROSS NATIONAL PRODUCT,
GROWTH RATE



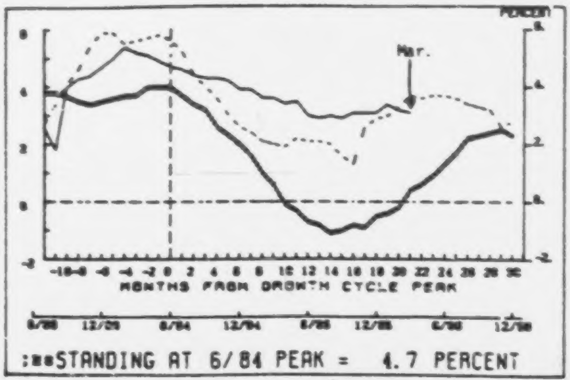
REAL RETAIL SALES,
GROWTH RATE



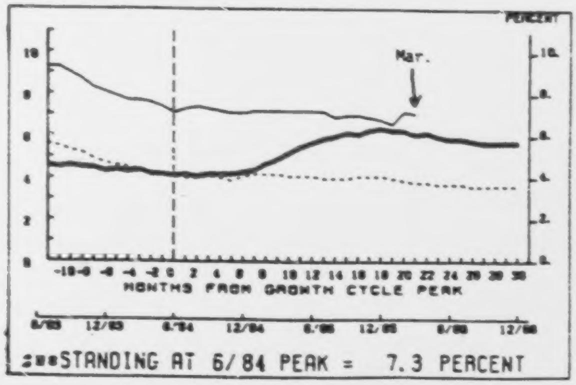
BCD COINCIDENT INDEX,
GROWTH RATE



NONFARM EMPLOYMENT,
GROWTH. RATE



UNEMPLOYMENT RATE



Growth rates are six-month smoothed or two-quarter smoothed annual rates, based on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

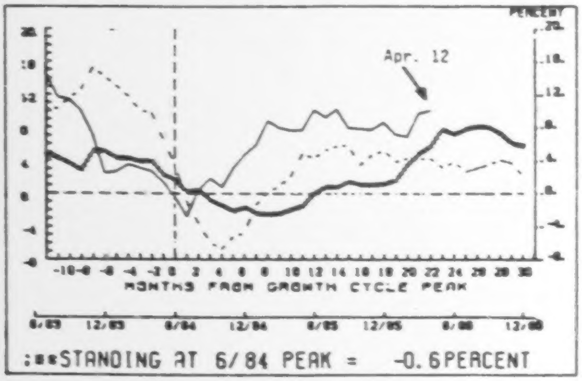
CHART A., continued
CURRENT SLOWDOWN COMPARED WITH THREE GROWTH RECESSIONS AND SEVEN REAL RECESSIONS

——— Current slowdown

- - - - - Average, three growth recessions (1951, 1962, 1966)

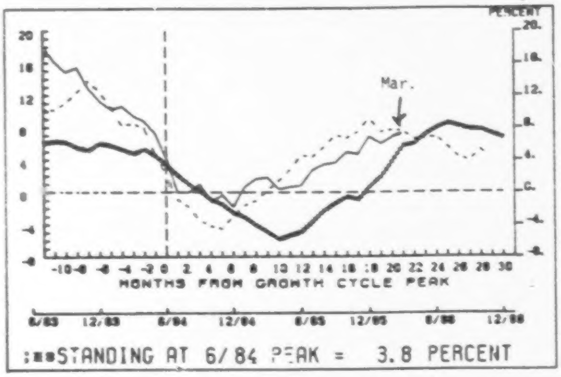
━━━ Average, seven real recessions (1948, 1953, 1957, 1960, 1969, 1973, 1980)

BUSINESS WEEK LEADING INDEX,
GROWTH RATE



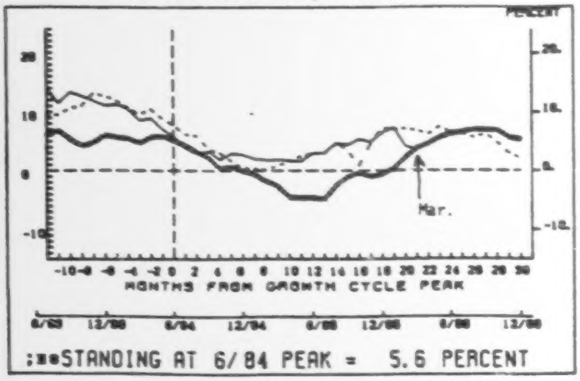
:**STANDING AT 6/84 PEAK = -0.6 PERCENT

BCD LEADING INDEX,
GROWTH RATE



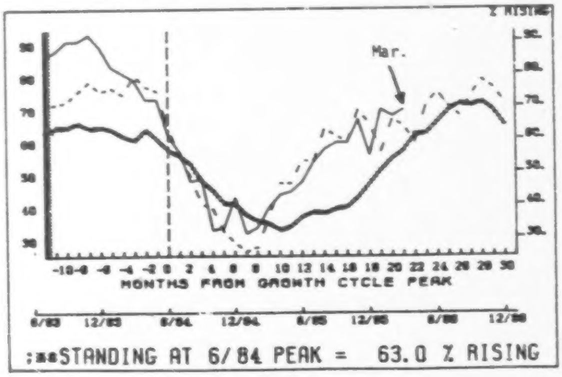
:**STANDING AT 6/84 PEAK = 3.8 PERCENT

LEADING EMPLOYMENT INDEX,
GROWTH RATE (CIBCR)



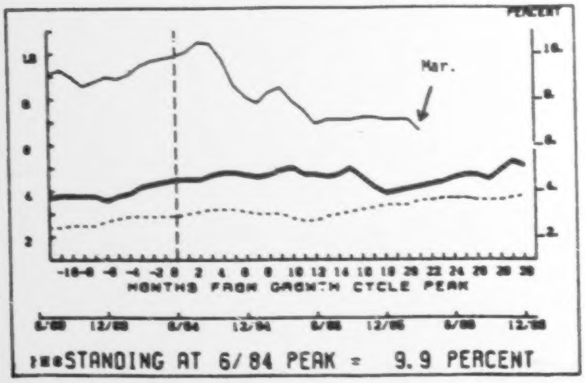
:**STANDING AT 6/84 PEAK = 5.6 PERCENT

DIFFUSION INDEX
OF LEADING INDICATORS



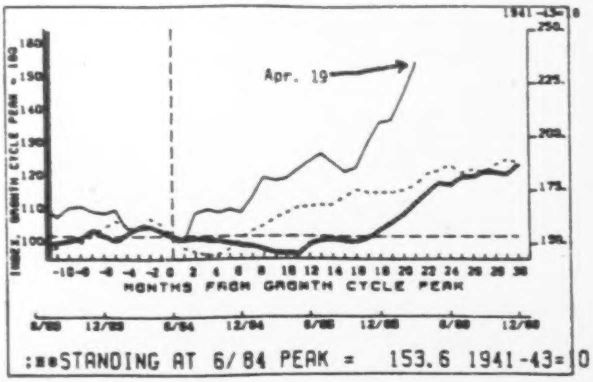
:**STANDING AT 6/84 PEAK = 63.0 % RISING

TREASURY BILL RATE
(SIX MONTH)



:**STANDING AT 6/84 PEAK = 9.9 PERCENT

COMMON STOCK PRICE INDEX
(S&P 500)



:**STANDING AT 6/84 PEAK = 153.6 1941-43=10

Growth rates are six-month smoothed or tw
on ratio of current month (quarter) to average of preceding twelve months (four quarters). Recession periods start from growth cycle peak.

separately in Chart A. The Business Week leading index, with a growth rate of 10% as of April 12, includes both stock prices and bond yields (treated inversely). The BCD leading index includes stock prices, and its latest growth rate (March) was 7.3%. The leading employment index of course includes neither stock prices nor interest rates, and its growth rate sagged to 3.5% in March. Our diffusion index of leading indicators in recent months reached its highest level since early 1984, pulled up in part by stock prices. Yet there has been a widespread advance in the leading indicators even when stock prices are excluded. Some of the same factors that push up stock prices have salutory effects on other economic variables. Lower interest rates and improved profit prospects promote investment decisions, for example.

All in all, the indicators are saying continued expansion, probably at a faster pace, with no recession in sight. More on this below.

How the Trade Deficit Has Turned Things Around

The growth rate of real GNP in the fourth quarter of 1985 was a meager 0.7%, but it recovered to a more satisfactory 3.2% in the first quarter. To what extent was this reversal due to the trade deficit? To answer this, let's look at what happened to gross domestic purchases, which is GNP minus the trade deficit (net exports). Gross domestic purchases excludes what we sell to foreigners (exports) but includes what we buy from them (imports). Since we've been buying more than we've been selling, gross domestic purchases is bigger than GNP. More importantly, it's been moving quite differently. In real terms it rose at the annual rate of 3% in the fourth quarter but only 1.5% in the first quarter. Domestic trade, in other words, grew at a very respectable rate at the end of last year, but only half that rate in the first quarter. The trade deficit made all the difference.

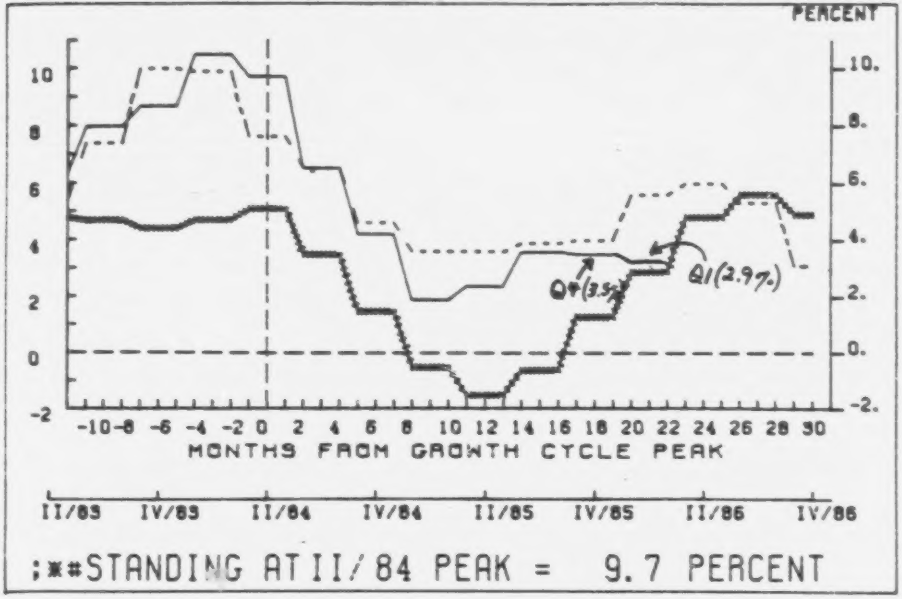
Chart B tracks the growth rate in real gross domestic purchases during the economic slowdown that began in mid-1984. Here the rates used are two-quarter smoothed rates, based on the ratio of the current quarter's level to the average of the preceding four quarters. This avoids having the growth rate depend on whatever happened in the previous quarter. In this instance the smoothing effect is considerable: the rate declines only from 3.5% in the fourth quarter to 2.9% in the first.

The implicit price deflator for gross domestic purchases, which gives a more realistic picture of the inflation facing U.S. citizens since it includes prices that we pay for imports and excludes prices that foreigners pay for our exports, also slowed in the first quarter. In terms of quarter-to-quarter changes this inflation rate declined from 3.7% to 2.3%. The two-quarter smoothed rate declined from 3.1% to 2.8%.

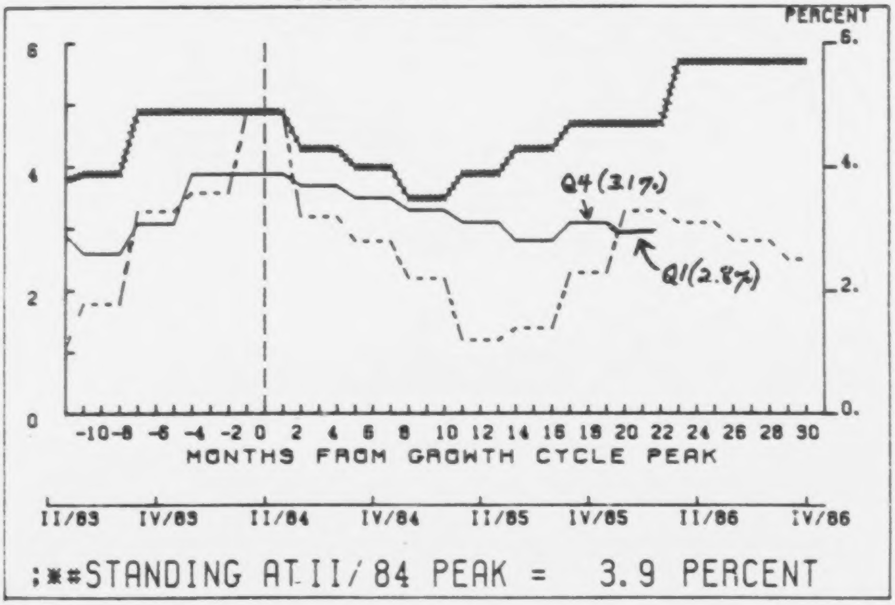
CHART B.

REAL GROSS DOMESTIC PURCHASES AND ITS IMPLICIT PRICE DEFLATOR

GROWTH RATE, REAL GROSS DOMESTIC PURCHASES



GROWTH RATE, IMPLICIT PRICE DEFLATOR FOR GROSS DOMESTIC PURCHASES



Note: Gross domestic purchases includes everything in GNP except net exports. Growth rates are based on ratio of current quarter to average of preceding four quarters, expressed as compound annual rate.

Center for International Business Cycle Research, Columbia Business School, New York, New York.

An update on our calculation of real GNP using the implicit price deflator for gross domestic purchases to deflate net exports is given in Table A. By our calculation, the recent movement in quarterly growth rates was even larger than in the Commerce Department's. The fourth quarter growth rate was only 0.6%; the first quarter rate was 3.4%. The reduction in the trade deficit was responsible for the improvement.

Lagging Interest Rates Prolong Expansions

Will the continuing decline in interest rates lengthen an already long economic expansion? History says yes. Nearly twenty years ago Columbia University economist Phillip Cagan found a relation between the lags of interest rates after business cycle troughs and the length of the business expansion. The longer it took for interest rates to begin rising after a business expansion got underway, the longer the expansion tended to last. Quick upturns in rates went with short expansions, delayed upturns with long expansions. Lags in downturns of rates were similarly related to the lengths of business contractions.*

Cagan went on to show that the variations in the behavior of interest rates were associated with a similar tendency involving monetary growth rates. Also, the effects seemed to work through the influence of the cost of credit on investment decisions, represented by the volume of construction contracts. The relation with durations of business cycle phases was not a very strong predictor of how long the phases would last, but it had persisted for more than a century.

Has the relationship held in the years since Cagan completed his work? A quick look at some of the evidence suggests that it has. The lags in bond yields at the four business cycle troughs since 1960 were fairly closely related to the lengths of the corresponding business cycle expansions, as the following figures show:

Business cycle Trough	Peak	Lead(-) or lag(+) of Corporate Bond Yields at Business Cycle Trough, in months	Length of Business Cycle Expansion, in months
Feb. 1961	Dec. 1969	+23	106
Nov. 1970	Nov. 1973	+14	36
Mar. 1975	Jan. 1980	+21	58
July 1980	July 1981	-1	12

---

*Phillip Cagan, The Influence of Interest Rates on the Duration of Business Cycles, Essays on Interest Rates, ed. Jack M. Guttentag and Phillip Cagan, National Bureau of Economic Research and Columbia University Press, 1969.

TABLE A.
ALTERNATIVE MEASURES OF GNP, NET EXPORTS AND PRICES

	----------Levels---------			Quarter-to-Quarter Percent Changes		
	III/85	IV/85	I/86	II/85 -III/85	III/85 -IV/85	IV/85 -I/86
In Current dollars (billions)						
1. Total GNP	4016.9	4059.3	4116.7	5.8	4.3	5.8
2. Net exports	-87.8	-113.4	-95.1	-	-	-
3. Gross domestic purchases (1-2)	4104.7	4172.7	4211.8	7.5	6.8	3.8
In 1982 dollars (billions)						
4. Total GNP, official	3584.1	3590.8	3619.2	3.0	0.7	3.2
5. Net exports, official	-119.8	-140.8	-126.0	-	-	-
6. Gross domestic purchases (4-5)	3703.9	3731.6	3745.2	5.1	3.0	1.5
7. Net exports, CIBCR (2÷10)	-79.2	-101.4	-84.6	-	-	-
8. Total GNP, CIBCR (6+7)	3624.7	3630.2	3660.6	3.4	0.6	3.4
Implicit Price Deflator (1982=100)						
9. Total GNP, official, (1 4)	112.08	113.05	113.75	2.7	3.5	2.5
10. Total GNP, CIBCR (3÷6)	110.82	111.82	112.46	2.3	3.7	2.3

For an extension of this table back to II 1984, see Recession-Recovery Watch, February 1986, pp. 9-10.

The 1961-69 expansion was obviously prolonged by the Vietnam War and associated government policies. In fact, if one recognized the "mini-recession" of 1966-67 as a real recession, with a peak in June 1966, the expansion's length would be cut to 64 months, somewhat more in line with the relationship to bond yield lags in other expansions.

Cagan observed that there had been a shift in the relationship around 1914, after which lags in bond yields became shorter but business expansions did not. For a given lag in yields, expansions were longer than they had been before 1914. He therefore measured the relationship separately before and after that date. We have extended his analysis to include the period since 1960, with results shown in Chart C. The regression line says that business cycle expansions have lasted, on average, somewhat more than 23 months after the upturn in bond yields. This formula would have produced the following estimates for the expansions listed above: 48, 39, 46, 22 months, respectively. Obviously the first estimate is much too short, and the others are only ball-park figures, with errors of 3, 12, and 10 months. Clearly bond yields don't have a very tight control over the business cycle. But they do have an influence.

As for the current expansion, bond yields turned up briefly during 1983-84 but have since dropped to new lows. Hence the lag will be at least 41 months (November 1982 to April 1986). If the relation cited above holds, the current expansion would run for 68 months, or until July, 1988. This date, however, gives far more precision to the relationship than is warranted by the historical record. Besides, bond yields may continue to decline!

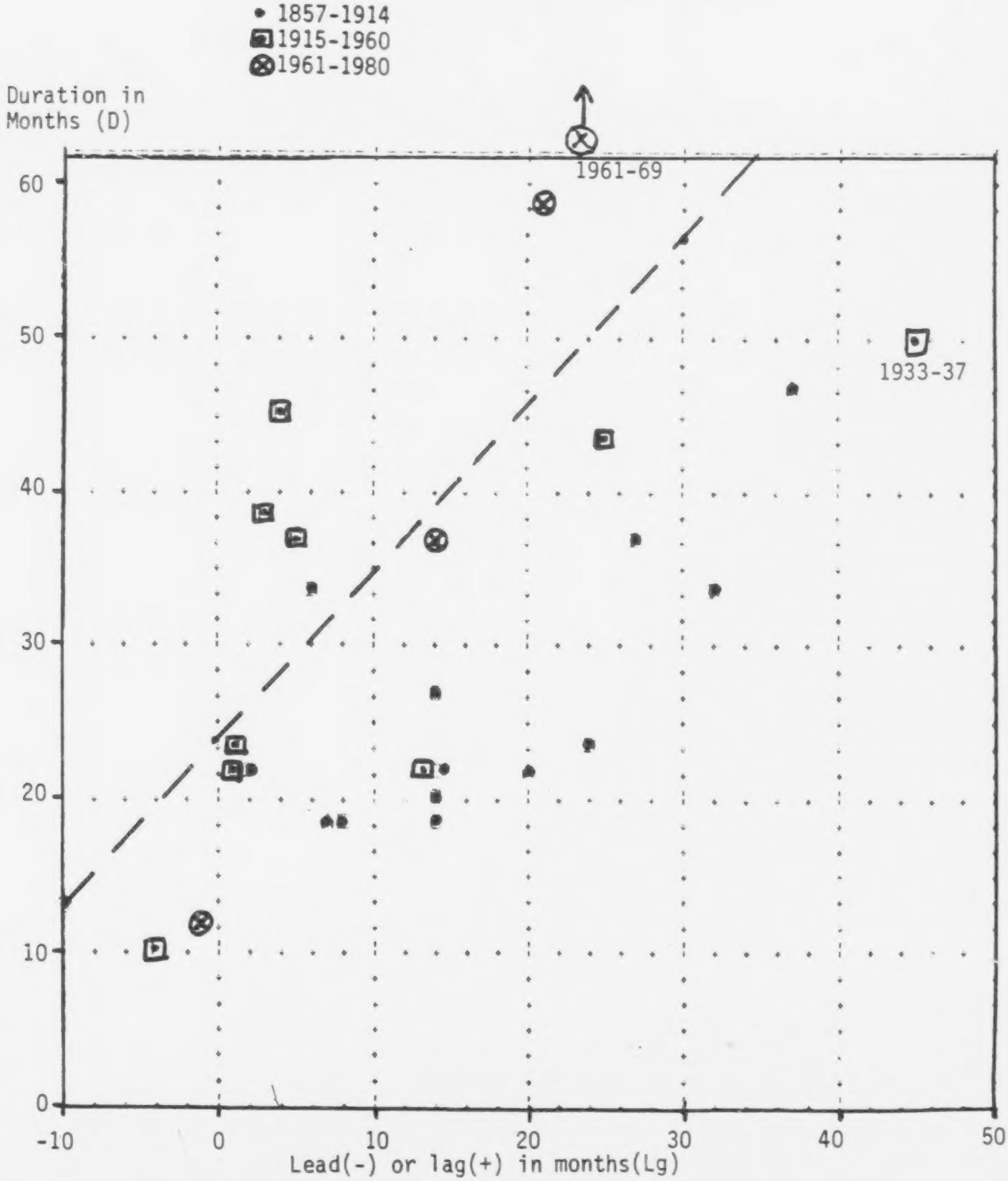
In addition, it is possible that the relation is now more affected by anticipations of inflation than in the earlier years covered by Cagan's analysis. An upturn in interest rates that results from expectations of more inflation might have very different consequences for investment decisions than one that results from tighter credit. We have not attempted to deal with this issue.

Growth in Employment Sparked by the Service Industries

One of the striking differences between the current recovery, which completed its 40th month in March, and the three previous ones that lasted even longer, is the power shown by the service industries to create jobs. None of the preceding long-lived recoveries generated as many jobs in their first 40 months as the current one did, and no sector was more responsible for this growth than the service industries. Nonfarm industries as a whole reported 11 million more jobs in March 1986 than in November 1982, when the recovery began. More than 8 million of these were provided by the service industries. That's 74% of the total job growth. In the 1975-78 recovery, the service group

CHART C.

LEAD OR LAG IN BOND YIELDS AT BUSINESS CYCLE TROUGHS, AND DURATION OF EXPANSIONS, 1857-1980



— — — Regression fitted to 11 expansions, 1915-81, excluding 1933-37 and 1961-69

$$\begin{array}{l} D = 23 + 1.1Lg \\ \quad (5.2) \quad (2.8) \end{array}$$

$r^2 = .47$ DW = 1.1 MAE = 9 months

accounted for 59% of a somewhat smaller total increase. In 1961-64, the share of services in job growth was 48%; and in 1949-53 it was only 30% (see Table B).

The vigor of the American economy no longer resides with the goods-producing industries, important as these are. Nor does it reside with the government. Although the government -- Federal, state, and local -- provides a large number of jobs, in the current 40-month recovery the gain in government jobs was less than a million -- smaller than in any of the three preceding recoveries. Government accounted for only 6% of the current total job gain. Goods-producing industries -- manufacturing, construction, and mining -- contributed 20%. This was far smaller than the gain the private service industries, but it nevertheless meant 2.2 million new jobs. The goods-producing industries are far from dead.

One of the significant implications for the business cycle outlook of the takeover by the service industries is that in future recessions total employment is likely to be more stable. In the most recent recession, which ran from July 1981 to November 1982, about 2.7 million nonfarm jobs were lost. But the goods-producing industries accounted for all of this loss. A small decline in government employment was nearly offset by a small rise in service industries employment. Hence the recession can be largely laid at the door of the goods-producing industries. The service industries, in fact, helped to stabilize total employment. This has been their usual role, but since the services share of total employment is now far larger than it used to be, their stabilizing effect is more powerful too. That trend is still going on, and will be around to help reduce the severity of the next recession.

Table C lays out the record of the past eight recessions on this point. The big declines in employment, both in numbers of jobs and in percentage terms have been in the goods producing industries. The services industries have usually provided offsetting increases, especially in recent recessions. In goods employment the last four recessions produced a larger average decline than the first four recessions did. But the offset from government and private services employment turned this around, so that the total loss of jobs was smaller in the last four recessions. The percentage decline, in fact, was half as large in the last four recessions as in the first four. The trend has been toward less severe declines in total employment, and the service industries have been and are likely to continue to be responsible for that trend.

TABLE B.

CONTRIBUTION OF THE SERVICE INDUSTRIES TO GROWTH IN JOBS DURING LONG ECONOMIC RECOVERIES

First 40 Months of Recovery	Total Growth in Nonfarm Jobs (millions)	Growth in Jobs in (millions)			Percent Contributed by (percent of total job growth)		
		Service Industries	Government	Goods Industries	Service Industries	Government	Goods Industries
Oct 1949-Feb 1953	7.0	2.1	0.8	4.1	30	12	58
Feb 1961-June 1964	4.7	2.3	1.1	1.3	48	23	29
Mar 1975-July 1978	10.6	6.2	1.1	3.2	59	11	30
Nov 1982-Mar 1986	11.1	8.2	0.7	2.2	74	6	20

Note: Of the seven recoveries before the current one, only the three shown above lasted 40 months or more. Their lengths were: 1949-53, 45 months; 1961-69, 106 months; 1975-80, 58 months.

Center for International Business Cycle Research, April 1986

TABLE C. THE CHANGING PATTERN OF GOODS AND SERVICES EMPLOYMENT DURING RECESSIONS

Business Recession	Change in Billions				Percent Change			
	Goods-Producing Indus.	Government	Private Service Indus.	Total Non-Farm	Goods-Producing Indus.	Government	Private Service Indus.	Total Non-Farm
Nov. 48-Oct. 49	-1.6	+0.1	-0.3	-1.8	-8.7	+2.0	-1.6	-4.1
July 53-May 54	-1.5	+0.1	-0.1	-1.5	-7.0	+1.7	-0.4	-2.9
Aug. 57-Apr. 58	-1.6	+0.1	-0.5	-2.0	-7.8	+1.7	-2.1	-3.8
Apr. 60-Feb. 61	-1.1	+0.1	0	-1.0	-5.1	+1.2	-0.1	-1.8
Dec. 69-Nov. 70	-1.4	+0.4	+0.5	-0.6	-5.9	+2.9	+1.4	-0.8
Nov. 73-Mar. 75	-2.7	+0.7	+0.7	-1.3	-10.6	+5.3	+1.7	-1.6
Jan. 80-July 80	-1.2	+0.2	+0.2	-0.9	-4.7	+1.1	+0.3	-1.0
July 81-Nov. 82	-2.7	-0.2	+0.2	-2.7	-10.5	-1.1	+0.4	-2.9
Average Change:								
First 4 Recessions, 1948-61	-1.4	+0.1	+0.2	-1.6	-7.2	+1.6	-1.0	-3.2
Next 4 Recessions, 1969-1982	-2.0	+0.3	+0.4	-1.4	-7.9	+2.0	+1.0	-1.6

Note: Changes are computed from three-month averages centered on the business cycle peak and trough months shown in col. 1.

Center for International Business Cycle Research, April 1986.

Changes in this issue:

New Unit for Real-Dollar Series

Seven series previously reported in 1972 dollars have been converted to 1982 dollars: GNP, personal income, personal consumption expenditures, retail sales, new orders for plant and equipment, inventory-to-sales ratio, and change in inventories on hand and on order. In addition, the output figures underlying the output per hour and unit labor cost series are now in 1982 dollars, although the indexes remain on a 1977 base.

For further information about Recession-Recovery Watch call or write:

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RECESSION-RECOVERY PATTERN CHARTS

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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover sixty-three indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, all previous expansions since 1948 (or whenever after 1948 the indicator begins), and the average of three long expansions. The three long expansions are: 1949-53, 45 months; 1961-69, 106 months; 1975-80, 58 months. The expansions that are excluded from the averages covered the following periods: 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, November 1985, which is 36 months after the November 1982 business cycle trough, all the entries for that indicator will be for 36 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

The tables pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending four years after the trough. The average recovery is also shown for each month of the five-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

To order the 100-page 1986 Supplement, send in the order form on the back cover.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 40 MONTHS AFTER THE BUSINESS CYCLE TROUGH

ACTUAL LEVELS

		Months After Business Cycle Trough	Expansions Starting							Average (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
			OCT 1949	MAY 1954 *	APR 1958 *	FEB 1961	NOV 1970 *	MAR 1975	JULY 1980 *			
	I. COMPOSITE INDEXES											
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	41	4.90	-6.10	8.00	4.00	-3.90	6.20	2.50	5.30	10.20	April 12
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	40	8.20	-3.60	9.20	6.50	-0.60	4.00	11.90	6.23	3.30	March
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	40	10.40	-2.60	3.20	5.70	2.20	10.40	14.90	8.83	4.50	March
9.	LEADING INDEX, GROWTH RATE	40	7.50	-3.60	11.00	6.70	-5.00	3.30	12.90	5.83	7.30	March
10.	COINCIDENT INDEX, GROWTH RATE	40	12.20	-2.60	5.20	6.70	-1.00	8.80	11.40	9.23	2.90	March
11.	DIFFUSION INDEX OF LEADING INDICATORS	40	n.a.	21.00	80.00	77.00	52.00	62.00	92.00	46.33	69.00	March
14.	RATIO, COINCIDENT TO LAGGING INDEX	40	119.50	94.60	95.90	96.30	112.50	126.90	132.60	114.23	121.80	March
16.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	38	n.a.	n.a.	4.30	4.30	4.70	7.30	8.60	3.87	4.40	January
	II. OUTPUT, INCOME AND SALES											
18.	REAL GNP GROWTH RATE	39	6.00	2.00	4.30	5.40	0.70	6.80	6.50	6.07	2.20	01
	III. EMPLOYMENT AND UNEMPLOYMENT											
24.	EMPLOYMENT TO POPULATION RATIO	40	58.90	57.70	56.00	56.00	58.70	59.70	59.10	58.33	60.00	March
29.	EMPLOYMENT DIFFUSION INDEX, 186 IND.	40	86.70	70.00	73.70	74.30	72.30	76.60	79.50	79.20	61.40	March
30.	UNEMPLOYMENT RATE: TOTAL	40	2.50	4.30	6.50	5.10	5.00	6.10	8.30	4.57	7.10	March
31.	UNEMPLOYMENT RATE: INSURED	40	2.50	3.90	5.20	3.70	3.20	3.20	3.10	3.13	2.80	March
33.	SHORT-DURATION UNEMPLOYMENT RATE	40	2.20	3.50	4.30	3.80	4.10	4.70	5.30	3.57	5.20	March
34.	LAYOFF RATE	39	0.21	0.49	0.54	0.40	0.49	0.33	0.53	0.31	0.40	February
35.	PART-TIME EMPLOYMENT RATIO	40	n.a.	n.a.	2.00	3.10	4.30	3.60	2.20	2.23	2.50	March
	IV. INVESTMENT COMMITMENTS AND INVENTORIES											
42.	INVENTORY/SALES RATIO	38	1.52	1.53	1.49	1.45	1.51	1.56	1.56	1.51	1.56	January
43.	CH IN INVENT ON HAND & ON ORDER, BIL 72$	38	17.10	-9.50	12.40	22.20	55.70	59.80	29.60	33.03	21.00	January
	V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
44.	OUTPUT PER HOUR, GROWTH RATE	39	2.10	2.20	4.50	3.90	-1.50	1.30	2.10	2.43	0.30	01
45.	UNIT LABOR COSTS, GROWTH RATE	39	4.00	2.00	-0.60	0.60	9.90	6.00	1.20	3.00	2.70	01
46.	HOURLY COMPENSATION, GROWTH RATE	39	5.90	4.00	3.60	4.50	8.20	8.30	3.30	6.23	2.90	01
47.	REAL HOURLY COMPENSATION, GROWTH RATE	39	5.80	1.40	2.60	3.30	-2.00	0.60	-0.50	3.23	0.20	01
48.	SELLING PRICE INDEX, GROWTH RATE	39	2.80	2.50	1.30	1.30	7.90	7.00	3.30	3.70	2.50	01
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	39	-1.20	-0.30	1.90	0.70	-2.00	0.20	2.10	-0.10	-0.20	01
50.	CORPORATE PROFIT MARGIN	36	10.30	10.00	10.10	12.80	7.20	7.90	6.00	10.33	9.30	04
51.	PRICE/LABOR COST RATIO	39	99.00	98.10	98.40	100.60	96.70	99.80	98.10	99.80	98.20	01
55.	CONSUMER PRICE INDEX, GROWTH RATE	40	0.20	3.30	1.00	1.20	11.30	8.60	4.00	3.33	1.30	March
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	40	-14.40	-11.90	4.10	7.50	57.50	13.60	22.80	2.23	-5.60	March
58.	IMPORT PRICES, GROWTH RATE	37	-6.70	0.60	-2.00	3.20	29.90	10.40	-6.40	2.30	1.40	December
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	40	n.a.	65.00	55.00	58.00	91.00	89.00	72.00	49.00	64.00	March
	VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	39	16.40	8.70	6.90	12.50	12.70	16.80	3.40	15.23	8.00	February
61.	FEDERAL DEBT, GROWTH RATE	40	1.90	0.90	3.20	2.60	1.00	10.90	18.20	5.13	14.40	March
62.	TOTAL DEBT, GROWTH RATE	39	7.00	3.60	3.20	8.20	9.40	15.40	8.50	10.20	10.00	February
63.	MONEY SUPPLY (M1), GROWTH RATE	40	2.70	0.00	2.50	3.10	5.90	8.50	8.10	4.77	10.60	March
64.	MONEY SUPPLY (M2), GROWTH RATE	40	3.90	2.70	7.00	7.20	7.00	7.60	9.50	6.23	5.90	March
65.	TREASURY BILL RATE (3-MONTH)	40	2.00	3.30	2.40	3.50	8.00	7.00	8.00	4.17	6.60	March
66.	NEW CORPORATE BOND YIELD (AA)	40	3.30	4.70	4.00	4.39	8.60	7.30	12.90	3.70	8.90	March

* Figures not included to avoid overlap with recessions beginning August 1957, April 1960, November 1973 and July 1981.

TABLE 2

RECESSION-RECOVERY STATUS UP TO 40 MONTHS AFTER THE BUSINESS CYCLE TROUGH

PERCENTAGE ABOVE (+) OR BELOW (-) THE PRECEDING BUSINESS CYCLCE TROUGH

		Months After Business Cycle Trough	Expansions Starting							Average (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
			OCT 1949	MAY 1954 *	APR 1958 *	FEB 1961	NOV 1970 *	MAR 1975	JULY 1980 *			
I.	COMPOSITE INDEXES											
1.	BUSINESS WEEK LEADING INDEX (CIBCR)	40	22.7	5.7	16.7	22.5	23.6	26.0	3.5	23.7	29.7	March
2.	LEADING EMPLOYMENT INDEX (CIBCR)	40	30.3	13.0	21.1	23.3	16.9	23.7	17.2	25.8	23.2	March
3.	COINCIDENT EMPLOYMENT INDEX (CIBCR)	40	41.5	16.9	13.9	19.7	20.8	32.9	5.5	31.4	30.1	February
4.	LEADING INDEX (BCD)	39	17.4	13.6	21.1	25.9	21.3	35.0	20.2	26.1	25.6	February
5.	COINCIDENT INDEX (BCD)	39	36.6	17.2	13.0	20.8	20.0	26.9	2.8	28.1	23.0	February
11.	LAGGING INDEX (BCD)	39	35.9	29.5	9.1	9.3	1.7	-3.3	-10.6	14.0	12.4	February
14.	EIGHT-COUNTRY LEADING INDEX (CIBCR)	38	n.a.	n.a.	27.3	10.0	24.6	19.1	0.6	10.0	21.4	January
II.	OUTPUT, INCOME AND SALES											
16.	REAL GNP	39	29.7	11.4	13.3	17.6	13.0	17.9	6.3	21.7	14.6	Q1
18.	INDUSTRIAL PRODUCTION INDEX	40	43.3	21.0	23.4	29.2	21.4	29.9	9.0	34.1	24.4	March
19.	REAL PERSONAL INCOME	39	22.5	16.6	12.2	15.5	13.9	15.4	7.0	17.0	12.0	February
20.	REAL CONSUMER EXPENDITURES	39	13.0	13.4	11.0	15.5	11.1	16.7	9.3	15.3	13.4	February
21.	REAL RETAIL SALES	40	13.9	15.9	10.7	16.6	15.6	19.3	12.0	16.6	15.3	March
III.	EMPLOYMENT AND UNEMPLOYMENT											
22.	TOTAL EMPLOYMENT	40	9.2	6.5	4.0	5.3	9.0	12.4	4.0	9.0	9.6	March
24.	NONFARM EMPLOYMENT	40	16.3	0.1	6.6	8.7	11.0	13.0	2.1	12.9	12.5	March
25.	NONFARM EMPLOYEE-HOURS	46	17.7	7.4	7.3	9.2	10.1	13.0	2.0	13.6	13.7	March
26.	EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES	40	23.9	3.5	3.4	6.8	10.0	14.2	-4.9	15.0	9.5	March
27.	EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	40	11.3	9.0	8.5	9.9	11.5	13.6	14.9	11.6	13.6	March
31.	INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	40	-49.4	-2.7	-25.6	-35.0	-4.6	-34.5	-27.9	-39.9	-33.6	March
35.	AVERAGE WORKWEEK, MANUFACTURING	40	4.4	0.5	3.6	3.6	2.3	4.2	3.4	4.1	4.4	March
36.	OVERTIME HOURS, MANUFACTURING	40	n.a.	n.a.	44.2	47.6	31.2	50.0	32.0	32.5	52.2	March
IV.	INVESTMENT COMMITMENTS AND INVENTORIES											
37.	NEW PRIVATE HOUSING STARTS	40	-13.3	-17.7	14.0	25.0	-8.9	116.3	37.3	42.7	51.9	March
38.	NEW PRIVATE HOUSING PERMITS	40	-19.7	-16.7	10.0	26.1	-12.1	10.1	33.6	8.2	46.6	March
39.	CONTRACT & ORDERS, PLANT & EQUIPMENT ('82$)	39	69.1	31.2	27.2	50.4	56.0	36.2	2.1	54.6	44.2	February
40.	NEW CAPITAL APPROPRIATIONS, MFG.	36	n.a.	51.7	23.9	66.0	86.5	24.2	-13.6	52.6	25.5	Q4
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
51.	BUSINESS FAILURES, LIABILITIES $100,000+	40	20.0	50.0	10.7	-0.0	7.1	-23.0	157.6	-1.3	11.0	March
52.	LEADING INDEX OF INFLATION (CIBCR)	40	17.0	7.3	5.2	6.0	34.3	19.5	-7.9	14.7	11.1	March
53.	CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	40	12.2	5.2	3.5	3.9	20.7	24.1	22.3	13.4	11.2	March
55.	INDUSTRIAL MATERIALS PRICE INDEX	40	0.0	3.1	13.0	-1.7	126.5	24.3	-5.2	10.5	6.4	March
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
64.	STOCK PRICE INDEX (S&P 500)	40	63.4	54.6	50.7	29.4	13.0	17.3	30.5	36.7	69.9	March

TABLE 3

RECESSION-RECOVERY STATUS UP TO 40 MONTHS FROM THE BUSINESS CYCLE TROUGH

DIFFERENCE FROM THE PRECEDING BUSINESS CYCLE TROUGH

	Months After Business Cycle Trough	Expansions Starting OCT 1949	MAY 1954 ★	APR 1958 ★	FEB 1961	NOV 1970 ★	MAR 1975	JULY 1980 ★	Average (1949, 1961, 1975)	Current Expansion Starting NOV 1982	Last Month or Quarter Available
I. COMPOSITE INDEXES											
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	40	0.00	-15.20	3.80	-3.20	-8.00	8.80	16.60	1.87	4.50	March
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	40	9.50	1.50	17.30	8.70	4.20	13.80	17.60	10.67	2.10	March
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	40	24.30	11.30	21.70	13.80	9.30	27.10	23.10	21.73	12.30	March
9. LEADING INDEX, GROWTH RATE	40	-2.40	-5.70	14.10	5.40	-4.20	16.80	18.50	6.60	2.60	March
10. COINCIDENT INDEX, GROWTH RATE	40	19.40	6.80	19.80	13.40	4.60	23.90	20.20	18.90	9.70	March
11. DIFFUSION INDEX OF LEADING INDICATORS	40	n.a.	-17.70	60.70	40.30	26.30	44.30	57.30	20.20	22.00	March
13. RATIO, COINCIDENT TO LAGGING INDEX	40	0.40	-13.00	4.40	8.50	17.60	30.20	17.50	13.03	9.60	March
17. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	38	n.a.	n.a.	6.00	-0.60	6.90	18.10	10.10	5.83	3.60	January
II. OUTPUT, INCOME AND SALES											
17. REAL GNP GROWTH RATE	39	7.60	5.10	6.90	4.00	0.30	11.00	0.50	8.07	3.30	Q1
III. EMPLOYMENT AND UNEMPLOYMENT											
23. EMPLOYMENT TO POPULATION RATIO	40	3.40	1.40	0.00	0.10	1.20	3.20	-0.10	2.23	3.10	March
28. EMPLOYMENT DIFFUSION INDEX, 186 IND.	40	57.80	5.00	59.80	54.00	46.60	62.50	52.60	50.10	40.20	March
29. UNEMPLOYMENT RATE: TOTAL	40	-4.30	-1.30	-0.50	-1.50	-0.70	-2.20	0.70	-2.67	-3.40	March
30. UNEMPLOYMENT RATE: INSURED	40	-4.90	-1.50	-1.70	-2.60	-0.90	-3.10	-1.30	-3.53	-2.20	March
32. SHORT-DURATION UNEMPLOYMENT RATE	40	-3.00	-0.80	-0.60	-0.90	-0.50	-1.30	-0.40	-1.73	-1.30	March
33. LAYOFF RATE	40	-0.40	0.00	-0.30	-0.30	-0.10	-0.50	-0.30	-0.40	-0.40	March
34. PART-TIME EMPLOYMENT RATIO	40	n.a.	n.a.	0.60	1.40	0.50	0.70	-0.80	0.70	0.60	March
IV. INVESTMENT COMMITMENTS AND INVENTORIES											
41. INVENTORY/SALES RATIO	38	0.00	-0.07	-0.13	-0.10	-0.15	-0.17	-0.13	-0.09	-0.15	January
42. CH IN INVENT ON HAND & ON ORDER, BIL 82$	38	14.50	26.50	52.40	47.30	57.00	119.00	53.60	60.27	60.20	January
V. PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS											
43. OUTPUT PER HOUR, GROWTH RATE	39	1.20	1.40	1.30	2.10	-3.10	1.80	1.00	1.70	-1.00	Q1
44. UNIT LABOR COSTS, GROWTH RATE	39	4.00	1.30	-1.30	-0.40	5.40	-4.90	-9.40	-0.43	-2.40	Q1
45. HOURLY COMPENSATION, GROWTH RATE	39	5.10	2.40	0.00	1.80	2.30	-2.80	-7.60	1.37	-3.60	Q1
46. REAL HOURLY COMPENSATION, GROWTH RATE	39	3.00	-0.80	2.10	1.70	-2.70	0.40	0.30	1.70	-2.10	Q1
47. SELLING PRICE INDEX, GROWTH RATE	39	3.70	0.50	0.60	1.60	3.30	-6.20	-6.00	-0.30	-1.00	Q1
48. GROWTH IN PRICES MINUS GROWTH IN COSTS	39	-0.30	-0.80	1.90	2.00	-1.90	-1.30	3.40	0.13	0.60	Q1
49. CORPORATE PROFIT MARGIN	36	-2.00	0.00	1.30	3.60	0.60	2.20	2.60	1.00	5.40	Q4
50. PRICE/LABOR COST RATIO	39	0.30	0.20	0.90	4.00	-0.60	2.60	2.30	2.30	2.70	Q1
54. CONSUMER PRICE INDEX, GROWTH RATE	40	1.90	2.90	-2.70	-0.30	5.90	-1.10	-8.60	0.17	-2.00	March
56. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	40	1.70	-17.60	17.90	10.00	68.10	41.40	31.00	17.70	12.30	March
57. IMPORT PRICES GROWTH RATE	37	-1.40	-0.30	3.80	5.00	29.60	-1.40	-27.90	0.73	3.20	December
58. ANTICIPATED SELLING PRICES (D&B SURVEY)	40	n.a.	18.70	-0.70	3.00	12.50	13.30	-14.00	5.43	-3.70	March(Q1)
VI. MONEY, CREDIT, INTEREST RATES AND STOCK PRICES											
59. BUSINESS & CONSUMER DEBT, GROWTH RATE	39	13.10	2.50	3.40	4.90	7.90	10.80	-2.20	9.60	0.20	February
60. FEDERAL DEBT, GROWTH RATE	40	0.50	0.50	2.10	3.10	-3.80	-0.40	7.90	1.07	-5.33	March
61. TOTAL DEBT, GROWTH RATE	39	5.10	1.00	3.00	4.40	4.60	0.20	1.80	5.90	5.90	February
62. MONEY SUPPLY (M1), GROWTH RATE	40	3.40	-1.00	1.90	1.50	0.20	4.80	3.00	3.23	0.70	March
63. MONEY SUPPLY (M2), GROWTH RATE	40	4.20	-0.50	1.80	0.70	-1.10	0.10	1.20	1.67	-3.90	March
64. TREASURY BILL RATE (3-MONTH)	40	0.90	2.70	1.30	1.10	2.60	1.50	0.70	1.17	-1.30	March
65. NEW CORPORATE BOND YIELD (AA)	40	0.80	1.80	1.10	0.00	-0.10	-0.10	1.20	0.23	-3.30	March

RECESSION-RECOVERY PATTERNS

——— Current recovery to date (business cycle trough: November 1982 or IV Q 1982)

┼┼┼┼┼┼┼┼ Average of three long recoveries (1949-53, 1961-69, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average previous recovery developed beyond the present point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background. One can see easily where new figures or forecasts would be placed.

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side of most charts is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the trough standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the three cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, ratios or changes (e.g., the unemployment rate or GNP growth rate, employment to population ratio, or change in inventories), the charts show actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle. This scale shows how the averages for previous recoveries translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference.

The averages, which extend out to four years after the trough, include three recoveries: 1949-53, 1961-69 and 1975-80. The 1954-57, 1958-60, 1970-73 and 1980-81 recoveries, which lasted 39, 24, 36 and 12 months respectively, are excluded to avoid including the subsequent recessions in the averages.

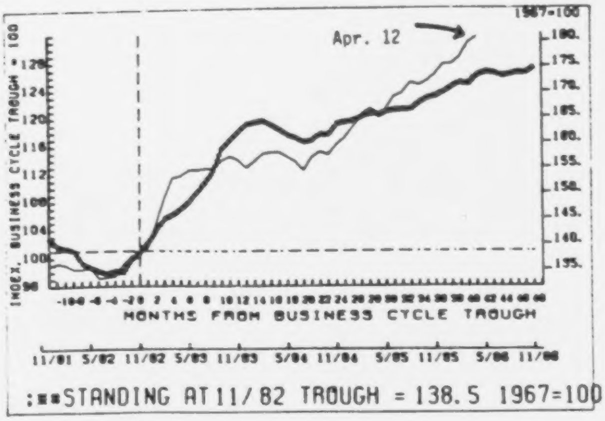
All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in the preceding three tables.

In the charts, growth rate is abbreviated "G.R."

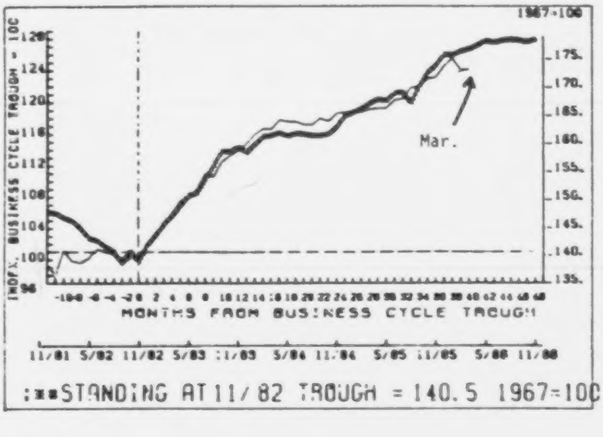
COMPOSITE INDEXES

1. BUSINESS WEEK LEADING INDEX (CIBCR)



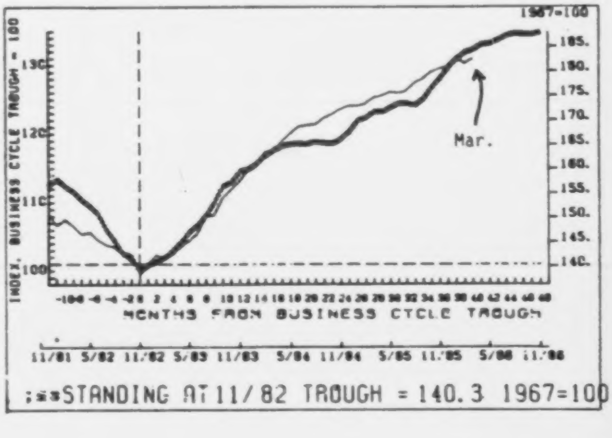
:**STANDING AT 11/82 TROUGH = 138.5 1967=100

2. LEADING EMPLOYMENT INDEX (CIBCR)



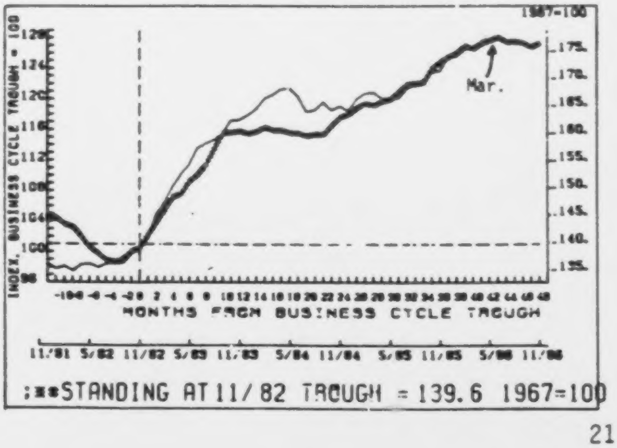
:**STANDING AT 11/82 TROUGH = 140.5 1967=100

3. COINCIDENT EMPLOYMENT INDEX (CIBCR)



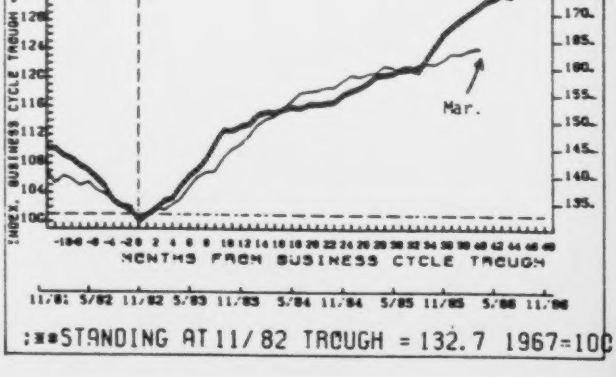
:**STANDING AT 11/82 TROUGH = 140.3 1967=100

4. LEADING INDEX (BCD)



:**STANDING AT 11/82 TROUGH = 139.6 1967=100

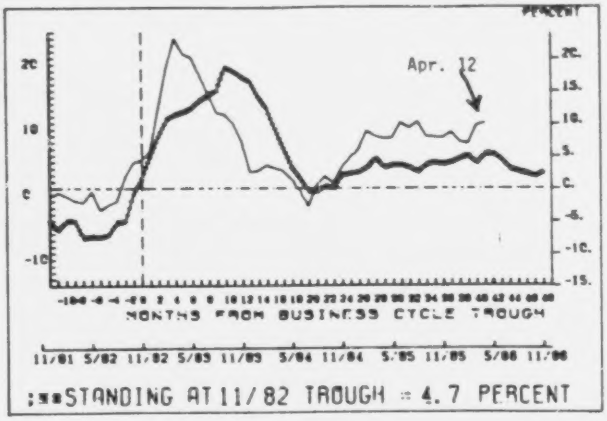
5. COINCIDENT INDEX (BCD)



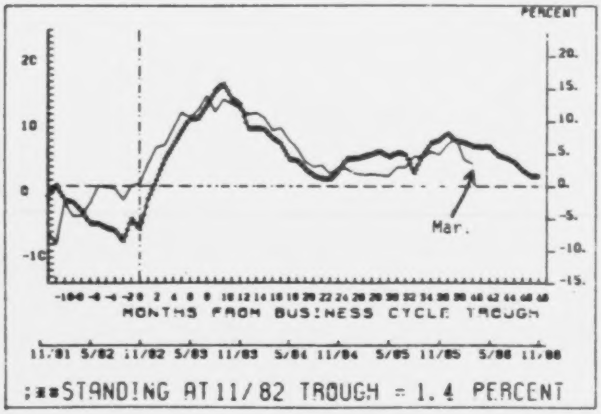
:**STANDING AT 11/82 TROUGH = 132.7 1967=100

COMPOSITE INDEX GROWTH RATES

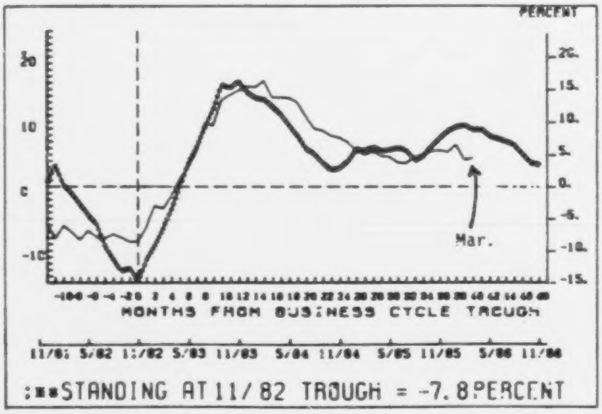
6. BUSINESS WEEK LEADING INDEX, G.R.



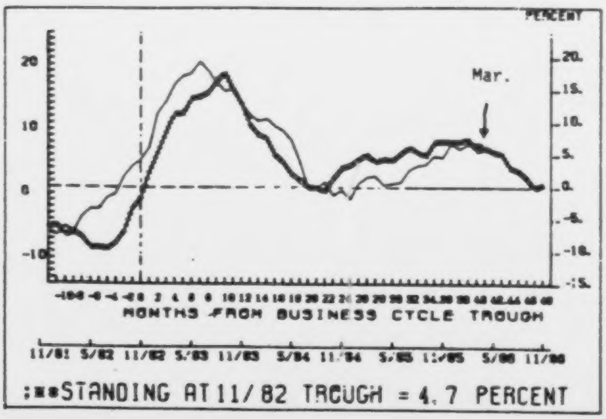
7. LEADING EMPLOYMENT INDEX, G.R.



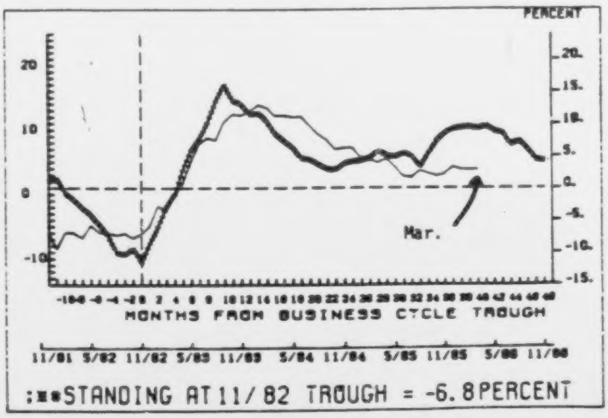
8. COINCIDENT EMPLOYMENT INDEX, G.R.



9. LEADING INDEX, G.R. (BCD)

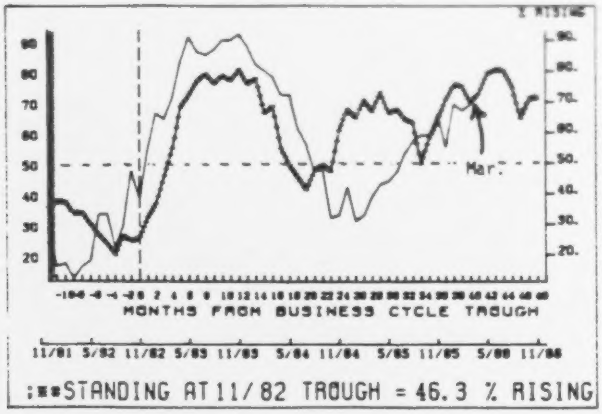


10. COINCIDENT INDEX, G.R. (BCD)



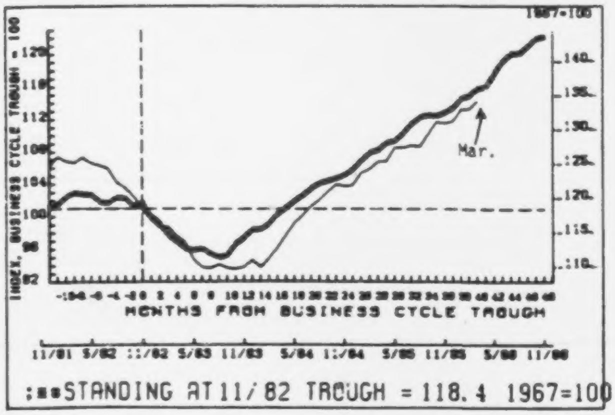
OTHER COMPOSITE INDEXES

11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



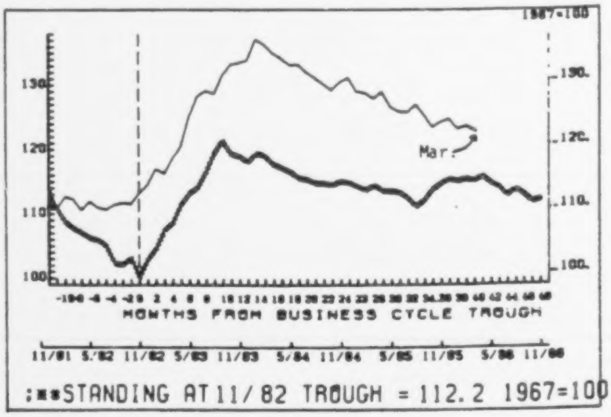
:**STANDING AT 11/82 TROUGH = 46.3 % RISING

12. LAGGING INDEX (BCD)



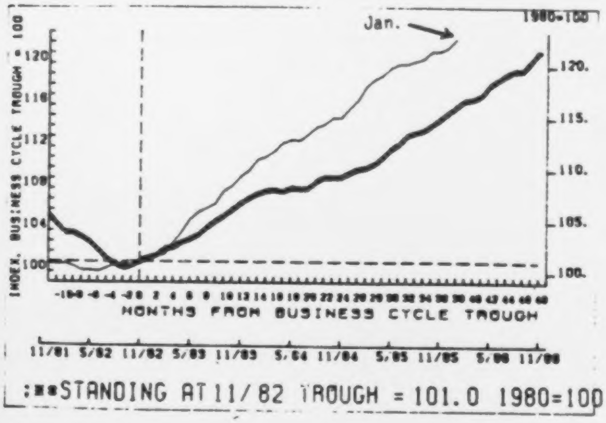
:**STANDING AT 11/82 TROUGH = 118.4 1967=100

13. RATIO, COINC. TO LAGGING INDEX



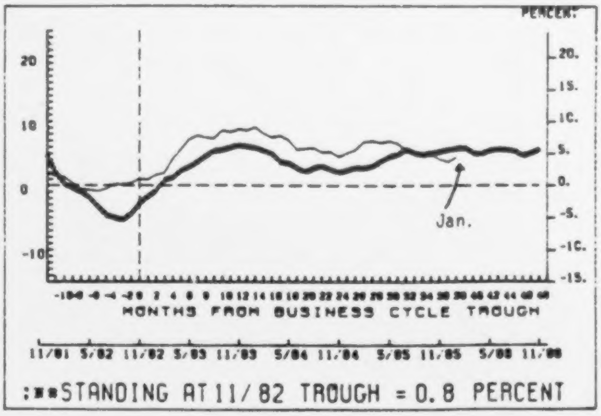
:**STANDING AT 11/82 TROUGH = 112.2 1967=100

14. 8-COUNTRY LEADING INDEX (CIBCR)*



:**STANDING AT 11/82 TROUGH = 101.0 1980=100

15. EIGHT-COUNTRY LEADING INDEX, G.R.

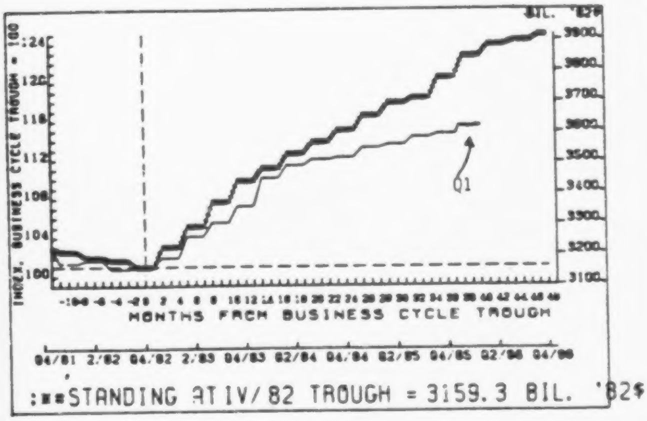


:**STANDING AT 11/82 TROUGH = 0.8 PERCENT

*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

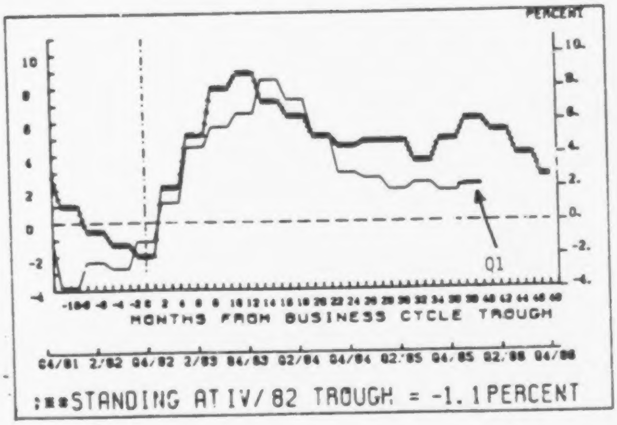
OUTPUT, INCOME AND SALES

16. REAL GNP



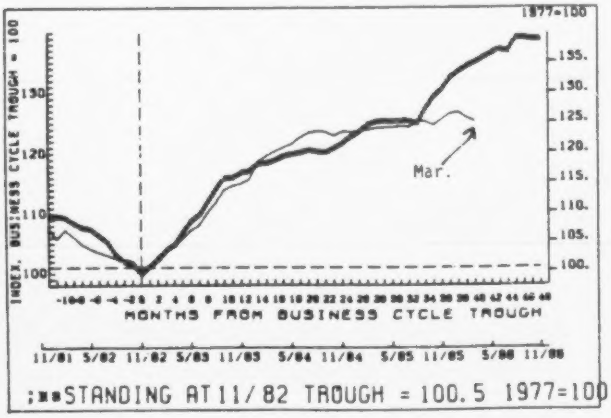
:**STANDING AT IV/82 TROUGH = 3159.3 BIL. '82$

17. REAL GNP GROWTH RATE



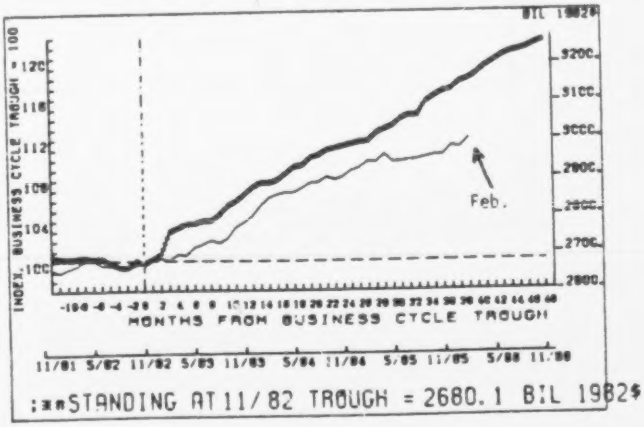
:**STANDING AT IV/82 TROUGH = -1.1 PERCENT

18. INDUSTRIAL PRODUCTION INDEX



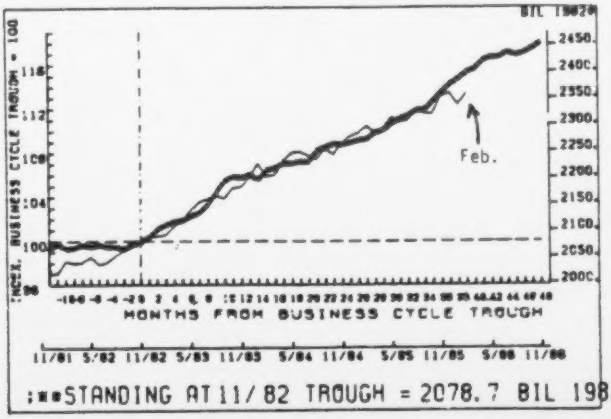
:**STANDING AT 11/82 TROUGH = 100.5 1977=100

19. REAL PERSONAL INCOME



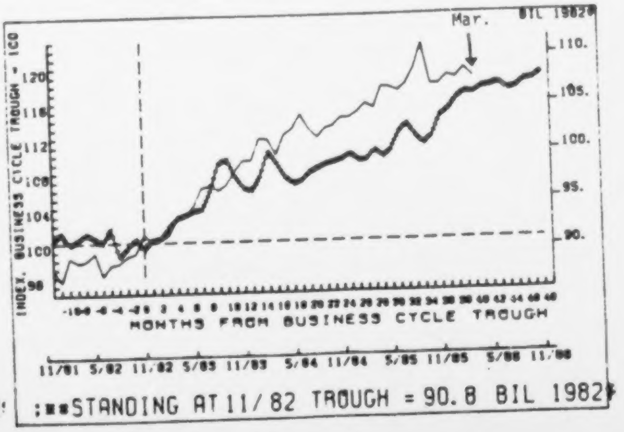
:**STANDING AT 11/82 TROUGH = 2680.1 BIL 1982$

20. REAL CONSUMER EXPENDITURES



:**STANDING AT 11/82 TROUGH = 2078.7 BIL 1982$

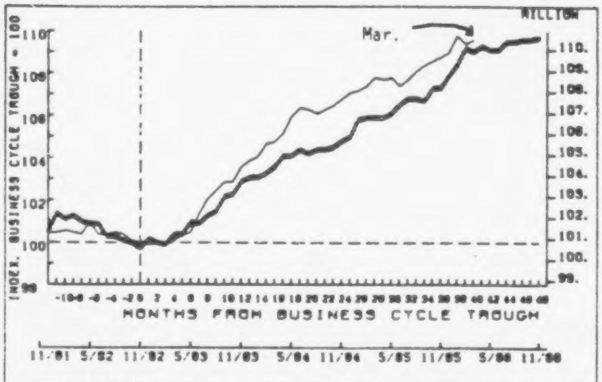
21. REAL RETAIL SALES



:**STANDING AT 11/82 TROUGH = 90.8 BIL 1982$

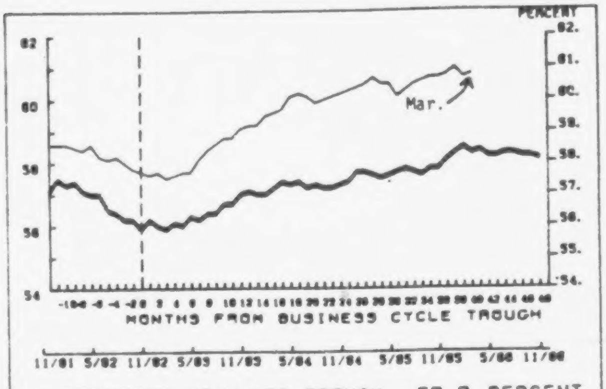
EMPLOYMENT

22. TOTAL EMPLOYMENT



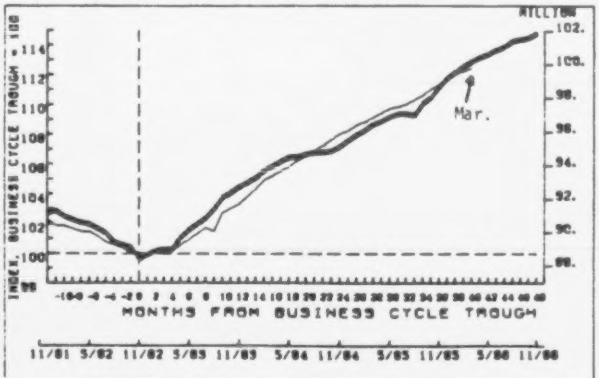
;**STANDING AT 11/82 TROUGH = 100.8 MILLION

23. EMPLOYMENT TO POPULATION RATIO



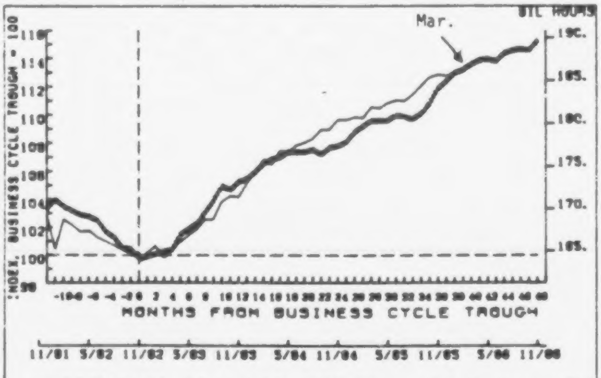
;**STANDING AT 11/82 TROUGH = 57.7 PERCENT

24. NONFARM EMPLOYMENT



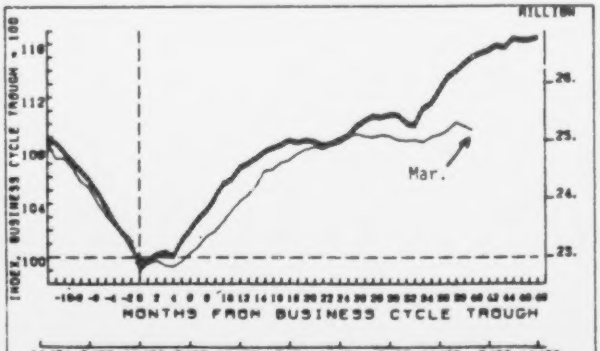
;**STANDING AT 11/82 TROUGH = 88.7 MILLION

25. NONFARM EMPLOYEE HOURS



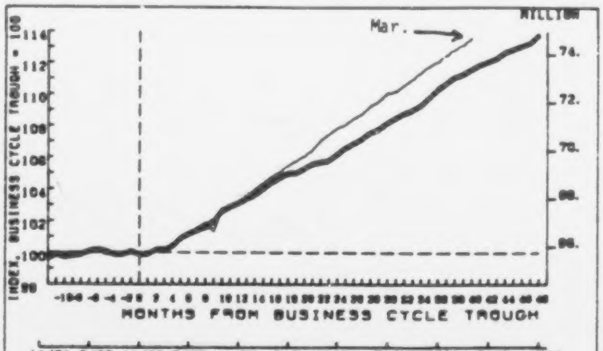
;**STANDING AT 11/82 TROUGH = 164.5 BIL HOURS

26. EMPLOYMENT IN GOODS-PROD. INDUS.



;**STANDING AT 11/82 TROUGH = 23.0 MILLION

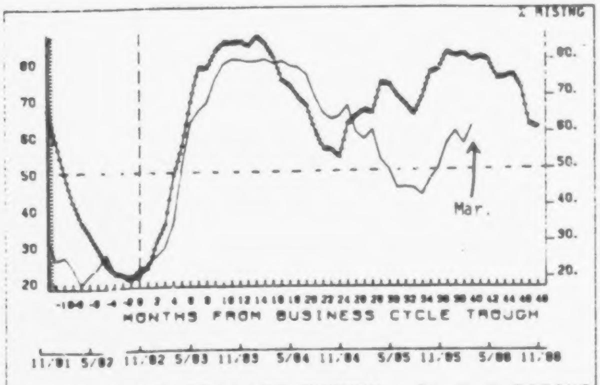
27. EMPLOYMENT IN SERVICE-PROD. INDUS.



;**STANDING AT 11/82 TROUGH = 65.7 MILLION

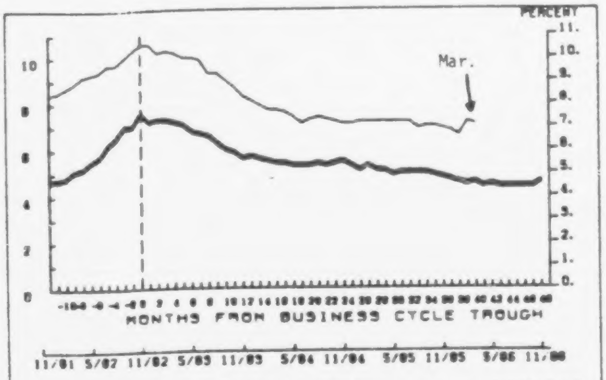
UNEMPLOYMENT

28. EMPLOY. DIFFUS. INDEX, 186 INDUS.



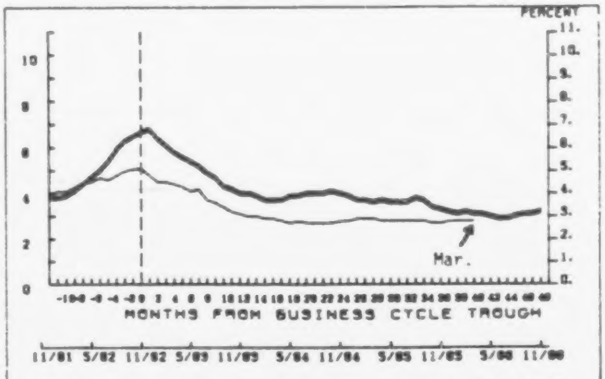
:**STANDING AT 11/82 TROUGH = 21.2 % RISING

29. UNEMPLOYMENT RATE: TOTAL



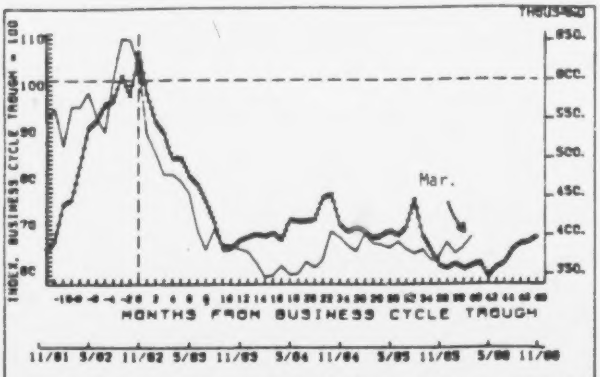
:**STANDING AT 11/82 TROUGH = 10.5 PERCENT

30. UNEMPLOYMENT RATE: INSURED



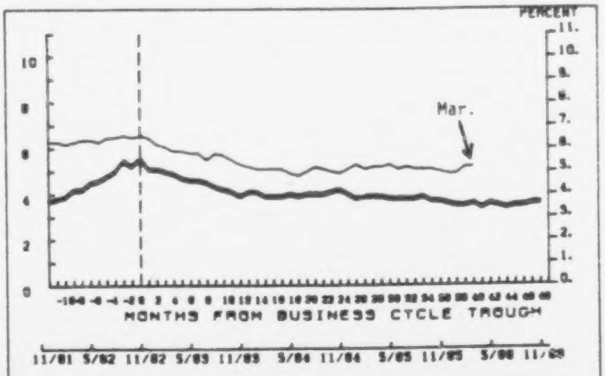
:**STANDING AT 11/82 TROUGH = 5.0 PERCENT

31. INITIAL CLAIMS, UNEMPLOY. INSUR.



:**STANDING AT 11/82 TROUGH = 599.3 THOUSAND

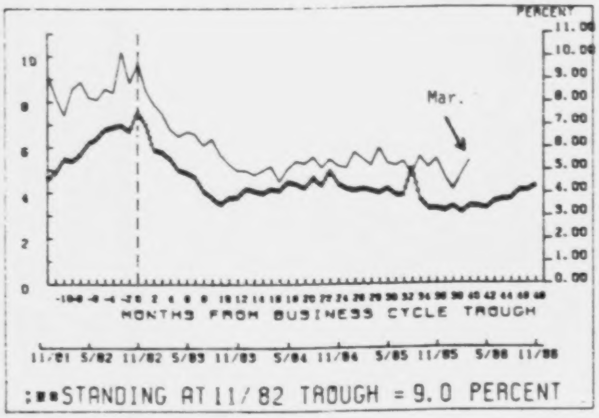
32. SHORT-DUR. UNEMPLOYMENT RATE



:**STANDING AT 11/82 TROUGH = 6.5 PERCENT

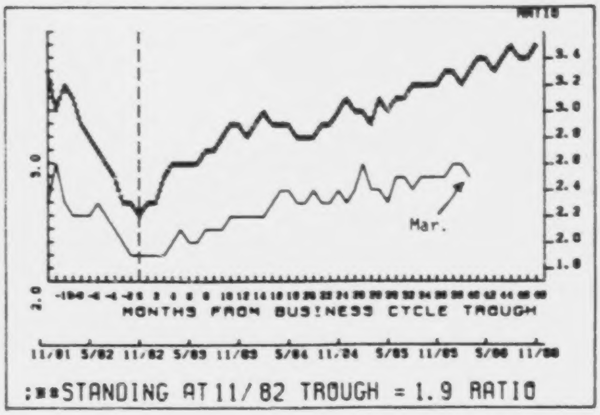
OTHER LEADING EMPLOYMENT INDICATORS

33. LAYOFF RATE TIMES TEN



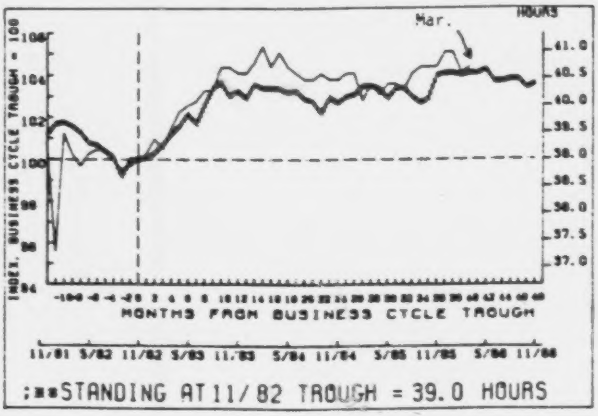
:**STANDING AT 11/82 TROUGH = 9.0 PERCENT

34. VOL. TO INVOL. PART-TIME EMPL. RATIO



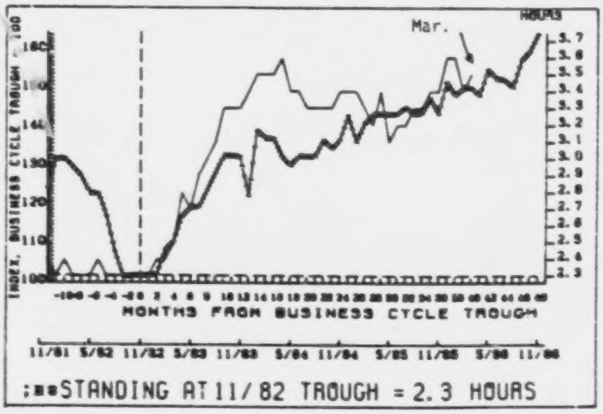
:**STANDING AT 11/82 TROUGH = 1.9 RATIO

35. AVERAGE WORKWEEK, MFG.



:**STANDING AT 11/82 TROUGH = 39.0 HOURS

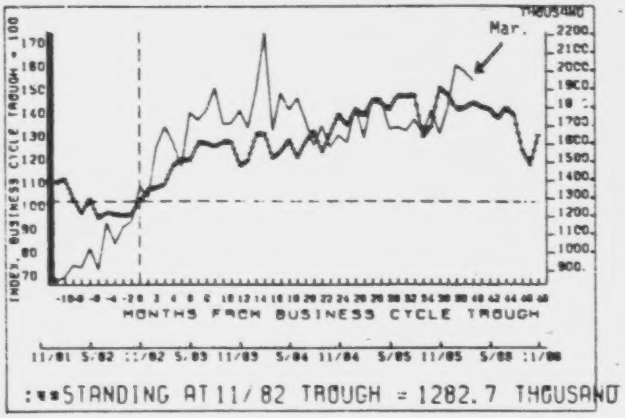
36. OVERTIME HOURS, MFG.



:**STANDING AT 11/82 TROUGH = 2.3 HOURS

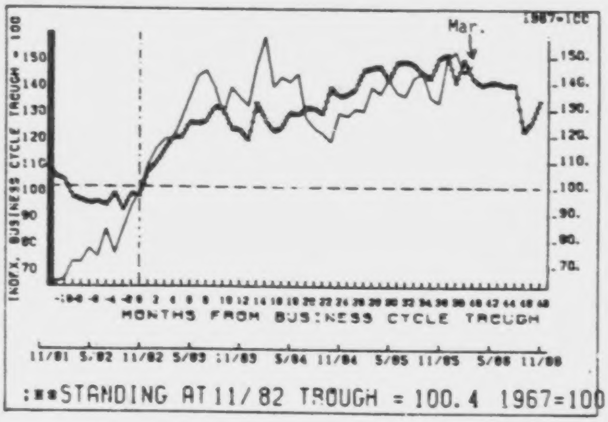
INVESTMENT COMMITMENTS AND INVENTORIES

37. NEW PRIVATE HOUSING STARTS



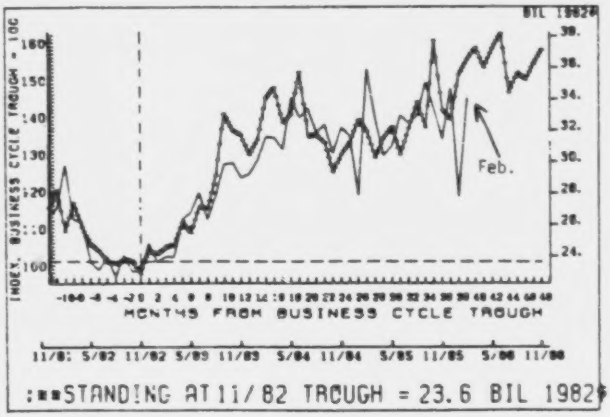
:**STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

38. NEW PRIVATE HOUSING PERMITS



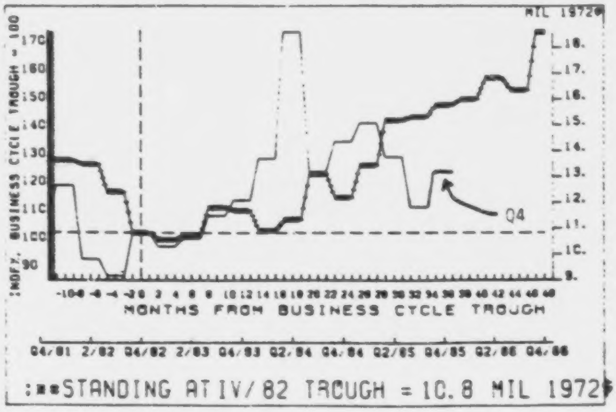
:**STANDING AT 11/82 TROUGH = 100.4 1967=100

39. CONTRACTS & ORDERS, PLANT & EQUIP.



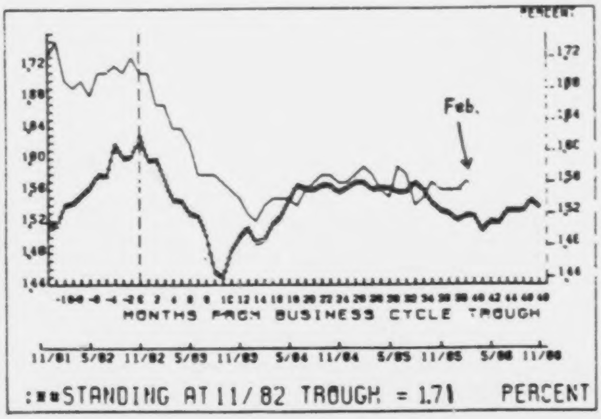
:**STANDING AT 11/82 TROUGH = 23.6 BIL 1982$

40. NEW CAPITAL APPROPRIATIONS, MFG.



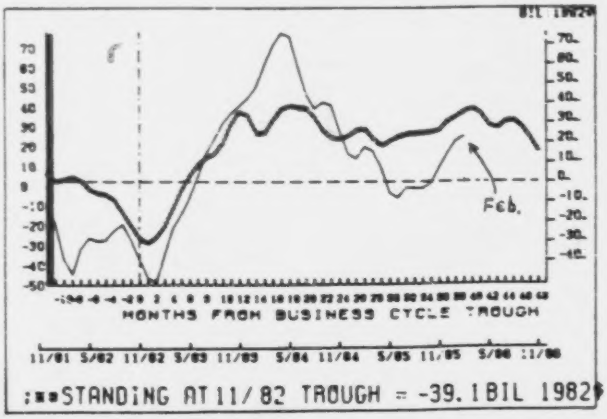
:**STANDING AT IV/82 TROUGH = 10.8 MIL 1972$

41. INV./SALES RATIO, MFG. AND TRADE



:**STANDING AT 11/82 TROUGH = 1.71 PERCENT

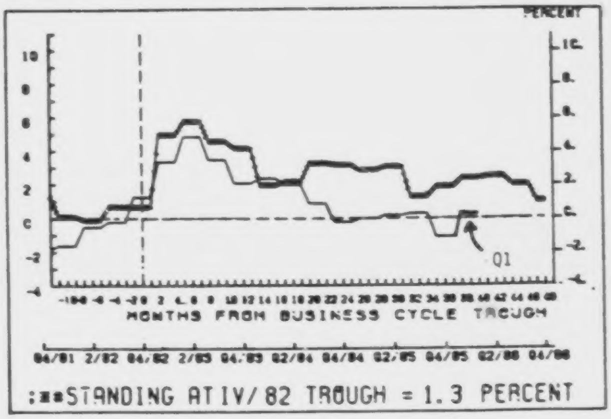
42. CHANGE IN INV. ON HAND & ON ORDER



:**STANDING AT 11/82 TROUGH = -39.1 BIL 1982$

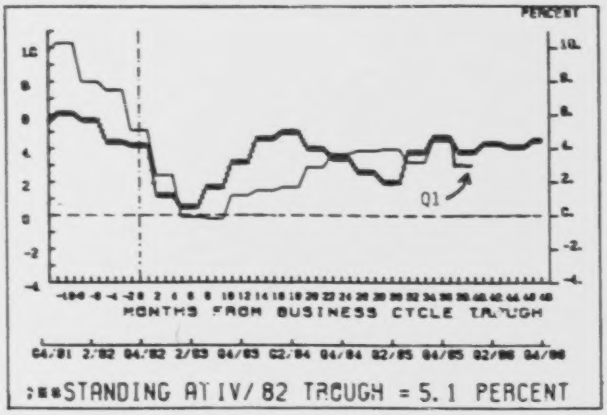
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

43. OUTPUT PER HOUR, G.R.



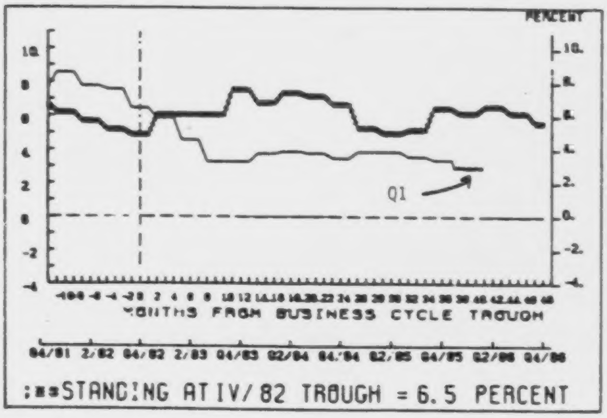
:**STANDING AT IV/82 TROUGH = 1.3 PERCENT

44. UNIT LABOR COSTS, G.R.



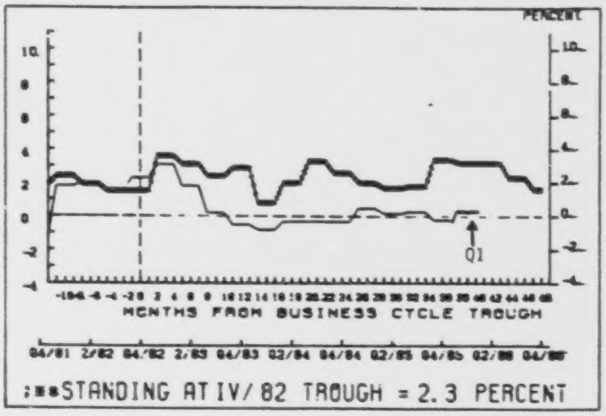
:**STANDING AT IV/82 TROUGH = 5.1 PERCENT

45. HOURLY COMPENSATION, G.R.



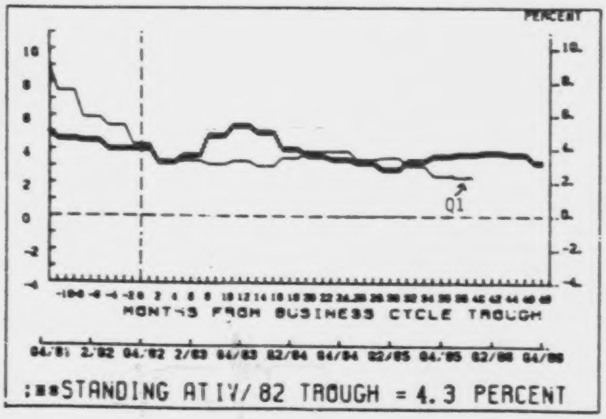
:**STANDING AT IV/82 TROUGH = 6.5 PERCENT

46. REAL HOURLY COMPENSATION, G.R.



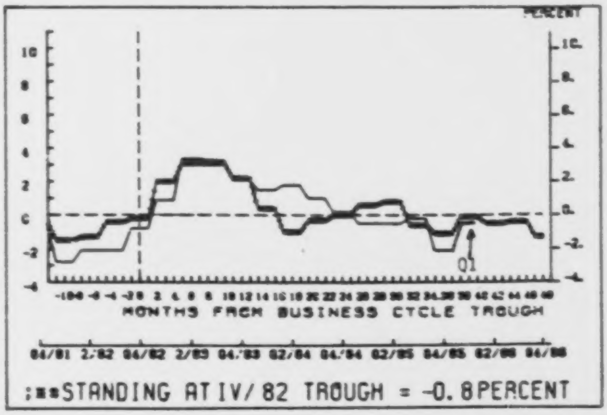
:**STANDING AT IV/82 TROUGH = 2.3 PERCENT

47. SELLING PRICE INDEX, G.R.



:**STANDING AT IV/82 TROUGH = 4.3 PERCENT

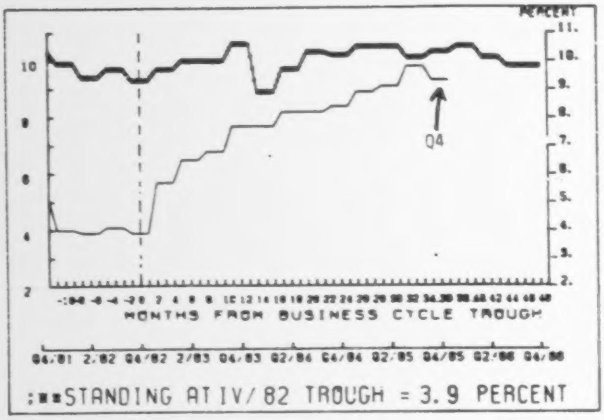
48. G.R. IN PRICES MINUS G.R. IN COSTS



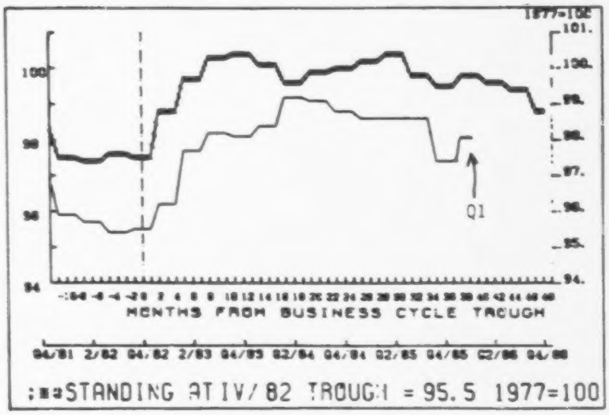
:**STANDING AT IV/82 TROUGH = -0.8PERCENT

PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

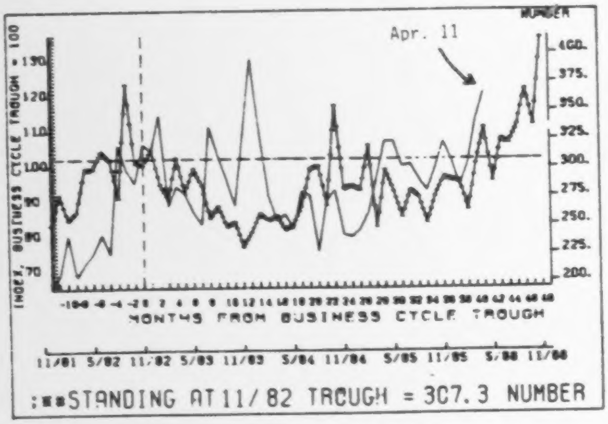
49. CORPORATE PROFIT MARGIN



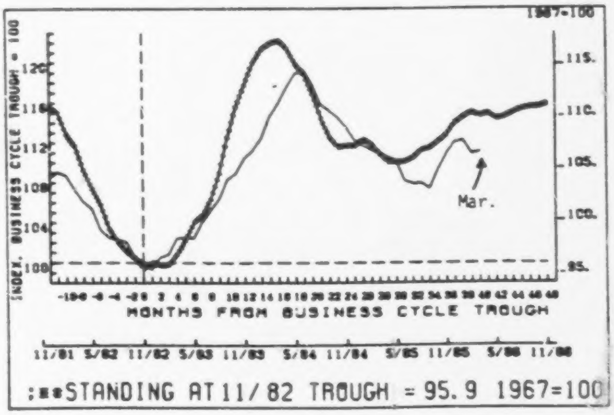
50. PRICE/LABOR COST RATIO



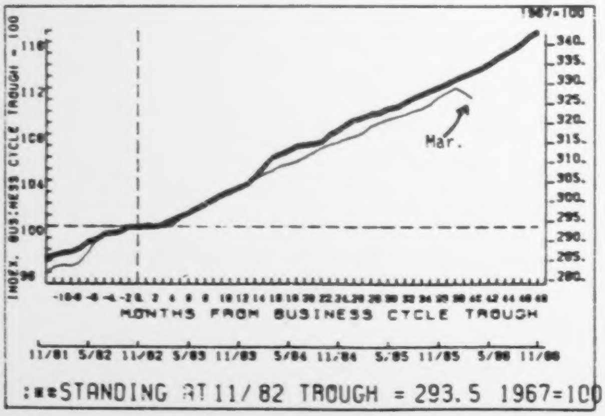
51. BUSINESS FAILURES



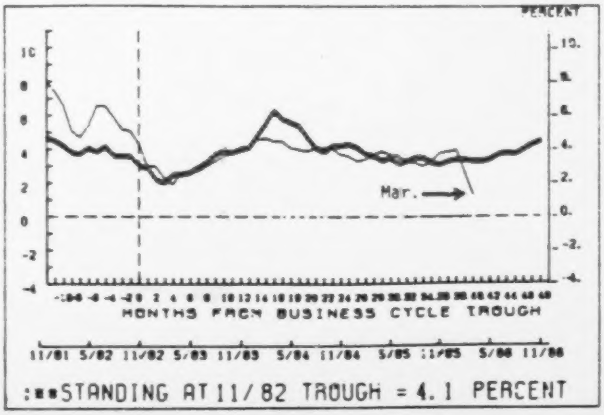
52. LEADING INDEX OF INFLATION (CIBCR)



53. CONSUMER PRICE INDEX

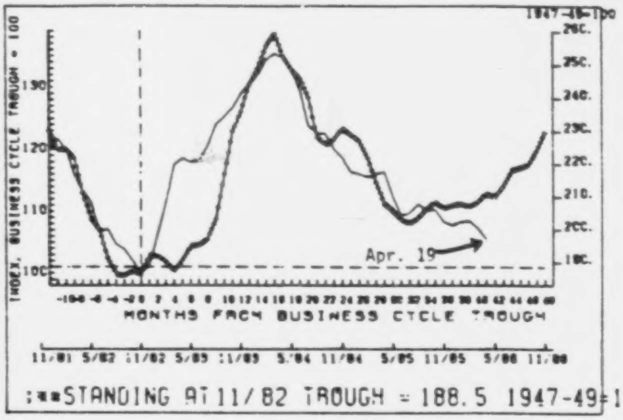


54. CONSUMER PRICE INDEX, G.R.



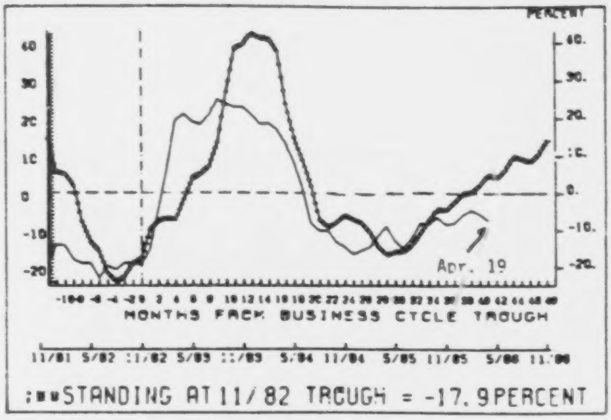
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

55. INDUSTRIAL MATERIALS PRICE INDEX



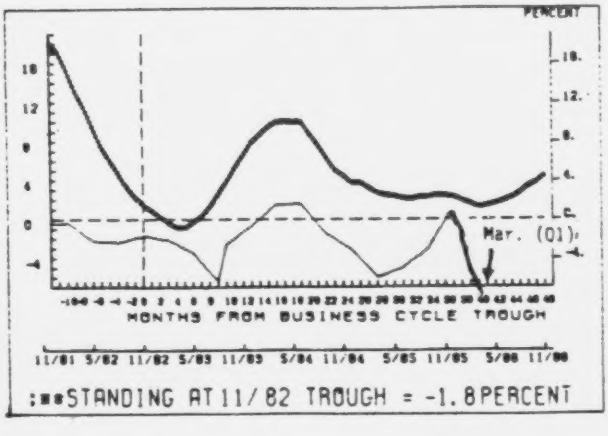
:**STANDING AT 11/82 TROUGH = 188.5 1947-49=100

56. INDUS. MATERIALS PRICE INDEX, G.R.



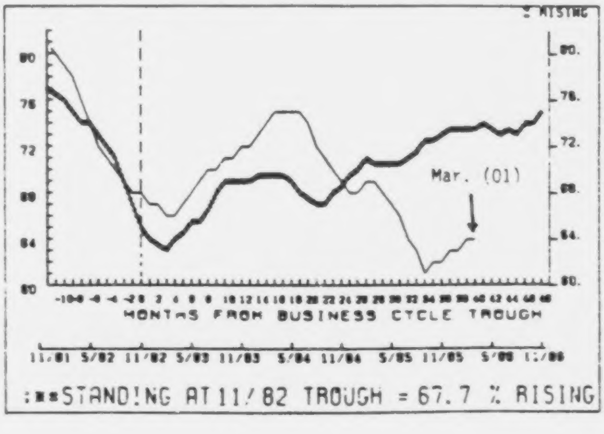
:**STANDING AT 11/82 TROUGH = -17.9 PERCENT

57. IMPORT PRICE INDEX, G.R.



:**STANDING AT 11/82 TROUGH = -1.8 PERCENT

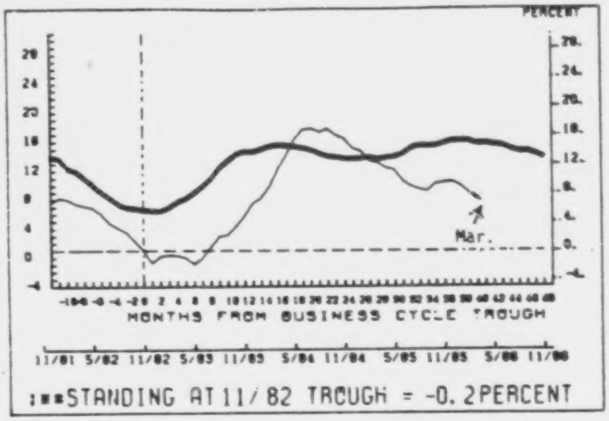
58. BUSINESSMEN'S ANTICPATED SELLING PRICES (SURVEY)



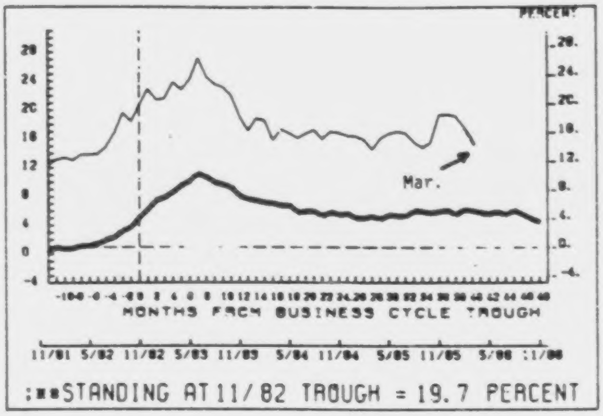
:**STANDING AT 11/82 TROUGH = 67.7 % RISING

MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

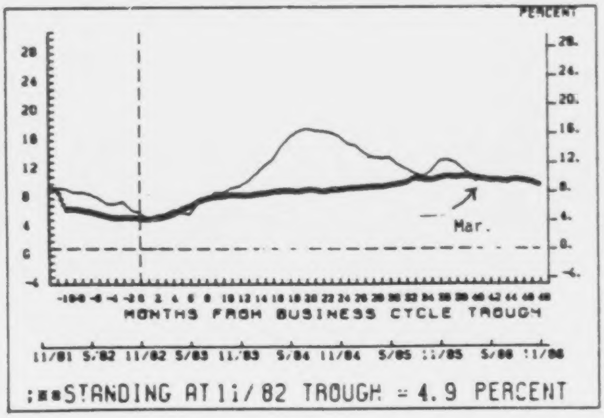
59. BUSINESS & CONSUMER DEBT, G.R.



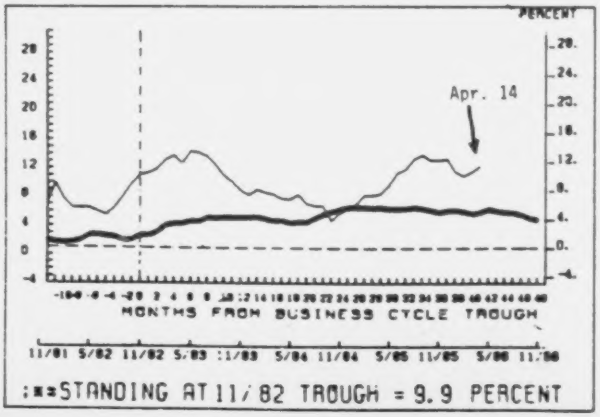
60. FEDERAL DEBT, G.R.



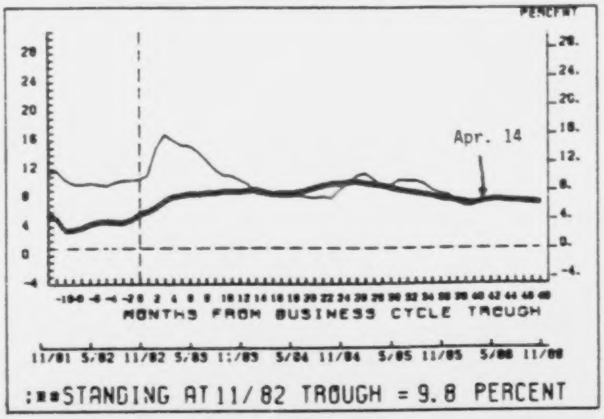
61. TOTAL DEBT, G.R.



62. MONEY SUPPLY (M1), G.R.

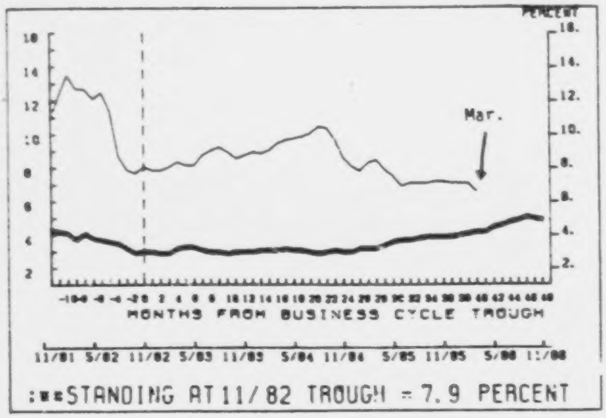


63. MONEY SUPPLY (M2), G.R.

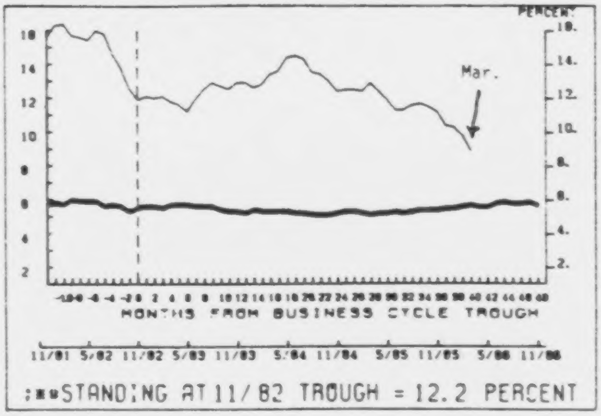


MONEY CREDIT, INTEREST RATES AND STOCK PRICES, cont.

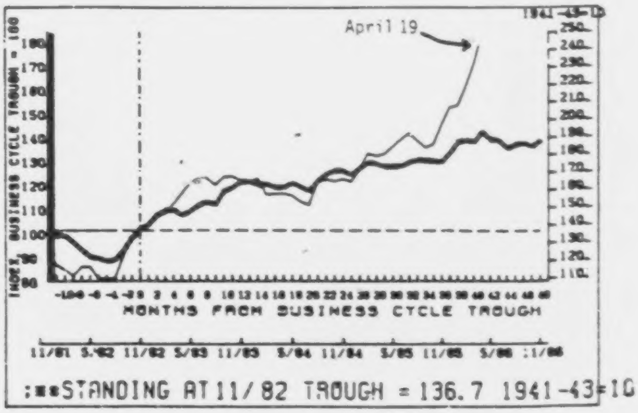
64. TREASURY BILL RATE (3-MONTH)



65. NEW CORPORATE BOND YIELD (AA)



66. COMMON STOCK PRICE INDEX (S&P 500)



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The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1986 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 8, No. 3
June 1986

Summary

The leading indexes that anticipate changes in output and employment are giving an optimistic current reading, with the degree of optimism ranging from modest to ecstatic. None are suggesting recession ahead. A new historical record of these types of indicators shows that they have faithfully anticipated recessions and recoveries for more than a hundred years.

The CIBCR leading inflation index, when used to generate signals of rising inflation or disinflation, has detected not only movements in the inflation rate but also in interest rates. The latest signal is down.

A new measure of unemployment severity that takes account of both the percentage unemployed and how long they've been unemployed has dropped dramatically in the current recovery but still remains at a high level relative to previous periods.

1. Leading Indicators Pass the Century Mark on the Way Up

Relatively few followers of the leading indicators can claim they've been watching them for a hundred years. Table A presents the readers of Recession-Recovery Watch with an opportunity to support that claim. In 1950 a study conducted by the author at the National Bureau of Economic Research in New York came up with a list of eight leading indicators, based on records of their performance during business cycles between 1870 and 1938. Although there have been many improvements in the leading indicator system since 1950, and still more are coming, the same eight indicators have continued to perform creditably, on the whole. The table (col. 10) shows that at the 35 business cycle peaks and troughs from 1870 to 1938, the group of eight led at 33 of the turns, with an average lead of five months at troughs and six months at peaks. Between 1948 and 1982 they led at 15 of the 16 turns, with an average lead of two months at troughs and twelve months at peaks. The record for the 34 years after the indicators were chosen was about as good as their record during the previous 68 years. In short, they've been worth watching for more than a century!

TABLE A. TIMING OF EIGHT LEADING INDICATORS SELECTED IN 1950

1. Timing at Business Cycle Troughs

Business Cycle Trough	Av. Work-week	New Orders	Housing starts	Comm. & Indus. Bldg. Contracts	New Incorp-orations	Business Failure Liabil. (inv.)	Stock Price Index	Sens. Commod. Price Index	Aver-age
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Lead (-) or Lag (+), in months								
Dec. 1870					-8				-8
Mar. 1879					-6	-13	-21		-13
May 1885					-6	-12	-4		-7
Apr. 1888					-4	-8	+2		-3
May 1891					-2	-6	-5		-4
June 1894					-8	-13	+9		-4
June 1897					-9	-9	-10	-12	-10
Dec. 1900					-10	-7	-3	+5	-4
Aug. 1904					-4	-13	-10	-1	-7
June 1908					-6	-6	-7	0	-5
Jan. 1912					-18	...	-18	-9	-15
Dec. 1914					0	-6	0	-7	-3
Apr. 1919			-4	-1	-4	...	-15	0	-5
July 1921	-5	-6	-7	-4	-6	+7	+1	-1	-3
July 1924	0	-2	0	0	-1	-9	-9	-1	-3
Nov. 1927	+5	...	-6	-2	-11	-7	...	-5	-4
Mar. 1933	-8	0	-3	-5	+21	-8	-9	-1	-2
June 1938	-6	-2	-6	+3	+15	-3	-2	+14	+2
Oct. 1945									
Oct. 1949	-6	-4	-9	-2	-8	-7	-4	-4	-6
May 1954	-1	-2	-8	...	...	-2	-8	-3	-4
Apr. 1958	0	-3	-2	+2	-5	0	-4	0	-2
Feb. 1961	-2	-1	-2	+3	-1	...	-4	-2	-1
Nov. 1970	-2	0	-10	+3	-8	-2	-5	+8	-2
Mar. 1975	0	0	0	+8	-2	-2	-3	+4	+1
July 1980	0	-2	-3	+2	-1	...	...	...	-1
Nov. 1982	-2	-1	-13	+1	-4	...	-4	+1	-3

TABLE A. continued

2. Timing at Business Cycle Peaks

Business Cycle Peak (1)	Av. Work-week (2)	New Orders (3)	Housing starts (4)	Comm. & Indus. Bldg. Contracts (5)	New Incorp-orations (6)	Business Failure Liabil. (inv.) (7)	Stock Price Index (8)	Sens. Commod. Price Index (9)	Aver-age (10)
	------	------	------	Lead (-) or Lag (+), in months	------	------	------	------	------
Oct. 1873							-17		-17
Mar. 1882					+15	-25	-9		-6
Mar. 1887					+1	-16	+2		-4
July 1890					0	-23	-2		-8
Jan. 1893					-5	-5	-5		-5
Dec. 1895					-2	-15	-3		-7
June 1899					+1	0	-2	+8	+2
Sept.1902					+5	-17	0	+6	-2
May 1907					-4	-19	-8	-3	-8
Jan. 1910					-2	-4	-1	-1	-2
Jan. 1913					-6	...	-4	-1	-4
Aug. 1918			-21		-19	...	-21	-1	-16
Jan. 1920			-6	-1	-1	-5	-6	+1	-3
May 1923	-6	-4	+8	-9	-1	+3	-2	-2	-2
Oct. 1926	-11	-11	-14	-13	-12	-7	...	-11	-11
June 1929	+4	...	-16	-5	-5	-4	+3	-18	-6
May 1937	-2	-5	-3	+2	-5	-4	-3	-2	-3
Feb. 1945									
Nov. 1948	-11	-3	-13	-32	-28	...	-5	-10	-15
July 1953	-3	-6	-8	...	...	-28	-6	-29	-13
Aug. 1957	-21	-20	-30	-17	-18	-27	-13	-20	-21
Apr. 1960	-11	-12	-17	+2	-12	-11	-9	-5	-9
Dec. 1969	-14	-10	-10	+1	-2	-16	-12	+2	-8
Nov. 1973	-7	-8	-11	-4	-8	-11	-10	+5	-7
Jan. 1980	-10	-13	-19	-11	-3	-28	...	+1	-12
July 1981	-2	-9	-10	-8	-3	...	-8	...	-7

TABLE A, continued
3. Summary

Business Cycles (1)	Av. Work-week (2)	New Orders (3)	Housing starts (4)	Comm. & Indus. Bldg. Contracts (5)	New Incorp-orations (6)	Business Failure Liabil. (inv.) (7)	Stock Price Index (8)	Sens. Commod. Price Index (9)	Aver-age (10)
Average lead or lag at troughs, in months									
Before 1938	-3	-2	-4	-2	-4	-8	-6	-2	-5
After 1945	-2	-2	-6	+2	-4	-3	-5	+1	-2
Entire Period	-2	-2	-5	+1	-4	-6	-6	-1	-4
Average lead or lag at peaks, in months									
Before 1938	-4	-7	-9	-5	-2	-10	-5	-2	-6
After 1945	-10	-10	-15	-10	-11	-20	-9	-8	-12
Entire Period	-8	-9	-12	-8	-5	-13	-6	-4	-8
Number of leads, coincidences, and lags at troughs and peaks									
Before 1938									
Leads	6	6	10	8	26	26	25	16	33
Coin.	1	1	1	1	2	1	2	2	0
Lags	2	0	1	2	6	2	2	5	2
After 1945									
Leads	13	14	15	6	14	10	14	7	15
Coin.	3	2	1	0	0	1	0	1	0
Lags	0	0	0	8	0	0	0	6	1
Entire Period									
Leads	19	20	25	14	40	36	39	23	48
Coin.	4	3	2	1	2	2	2	3	0
Lags	2	0	1	10	6	2	5	11	3

What are the leading indicators saying now? Basically their story is: Not to worry. The Business Week leading index has the most optimistic stance, with a six-month smoothed annual growth rate of 12.5% as of June 7. The Commerce Department's leading index turned in a growth rate of 8.7% in April. The CIBCR's leading employment index was the weakest of the three, with a growth rate in May of 2.4%. None of these spell recession. Not to worry.

2. Leading Inflation Index Has Not Yet Signaled Higher Inflation or Rising Interest Rates

The Center's recently revised leading index of inflation may be used to generate signals of cyclical upturns and downturns in the inflation rate and in short-and long-term interest rates. The signals are based on a simple definition that can be applied mechanically. A trough signal, called T1, occurs when the six-month smoothed growth rate in the leading index rises above +1.0 percent. Table B shows that cyclical swings in the CPI inflation rate have been picked up rather well by the signals, although in a few cases false signals were recorded. More specifically, the inflation rate rose during nine of the eleven periods when the signals indicated a rise, and fell in nine of the ten cases when the signals indicated a decline. The overall percentage of appropriate responses of inflation rates to the relevant signals was 86 percent. The signal dates used for this record allow for a two-month lag in the availability of figures for the leading index.

Table B also shows that the inflation signals may be useful in monitoring short-and long-term interest rates. Inflation affects interest rates. Lenders who expect to be repaid in inflation-eroded dollars are likely to demand compensation in the form of more interest. Borrowers who expect to repay in inflation-eroded dollars are likely to agree to pay more interest. We find that during 73 percent of the cases when the signals flashed the message that higher inflation was ahead, corporate bond yields increased. The comparable statistic for Treasury bills was 64 percent. When the signals indicated lower inflation ahead, bond yields declined half the time while T-bills declined 64 percent of the time. Overall, the appropriate responses of both short-and long-term interest rates to the signals of rising and falling inflation ahead occurred in about 64 percent of the cases.

Another way to evaluate the signal system is to measure the basis-point change in interest rates during the intervals defined by the signals. According to Table B, those who issued corporate bonds shortly after the T1 signals would have cut their financing costs by close to a thousand basis points from what they would

TABLE B.

CIBCR INFLATION SIGNAL DATES AND SUBSEQUENT CHANGES IN INFLATION RATES, BOND YIELDS AND BILL RATES

Inflation Signal Dates		Change in CPI Inflation Rate Between Signal Dates, % points		Change in Corporate Bond Yields, basis points		Change in 91-Day Treasury Bill Rates, basis points	
T1 (1)	P1 (2)	P1+2 to T1+2 (3)	T1+2 to P1+2 (4)	P1+2 to T1+2 (5)	T1+2 to P1+2 (6)	P1+2 to T1+2 (7)	T1+2 to P1+2 (8)
11/49							
	6/51		6.7		41		55
11/52		-3.9		16		40	
	10/53		0.4		6		-41
10/54		-1.8		-36		-46	
	6/56		3.4		115		168
9/58		-1.6		33		-9	
	1/60		0.4		63		68
1/61		0.0		-40		-82	
	9/66		2.2		153		272
8/67		-0.3		42		-75	
	12/69		3.1		231		257
8/71		-2.9		-112		-267	
	11/71		0.0		-36		-109
1/72		-0.2		17		32	
	8/74		9.1		276		352
12/75		-6.2		-158		-239	
	4/80		0.1		241		215
5/83		-11.2		134		212	
	11/84		0.3		0		-136
12/85		-0.7		-270		-73	
	2/86		-2.1		-108		-90
Average or total		-2.9	+2.9	-374	982	-507	1011

Note: Signal dates are based on six-month smoothed growth rate in CIBCR leading index of inflation. T1 is the date when rate first rises above 1.0%; P1 is the date when rate first falls below -1.0%.

have been had they taken this action shortly after the P1 dates. Similar gains would have been available in short-term markets.1/

Since mid-1984 the leading inflation index has declined rather sharply. The inflation rate has too, and so have interest rates. Currently, the signal system is not suggesting a resurgence of inflation rates or interest rates in the months ahead.

3. New Measure of Unemployment Severity Has Dropped but Remains High

The unemployment rate is generally accepted as a measure of the health of the labor market. This rate, however, does not take into account the length of spells of unemployment. During recessions not only are more people unemployed, they tend to be unemployed longer. A new index of unemployment severity, constructed by Lorene Hiris at the CIBCR, takes both factors into account by multiplying the unemployment rate by the average duration of unemployment in weeks. This measures the number of weeks of unemployment per hundred persons in the labor force. For example, the unemployment rate in May was 7.2% and the average unemployed person had been unemployed for 14.4 weeks. The new measure is 7.2 times 14.4 or 104 weeks.2/

As Table C shows, during recovery periods unemployment severity usually declines (an exception was the brief recovery in 1980-81). During the 42 months of the current recovery, November 1982 to May 1986, the index dropped from 181 to 104, or by 43%. That's bigger than the average decline during the entire span of previous recoveries. It was surpassed by only two recoveries, both of which lasted longer than 42 months. However, the current level of the Severity Index is higher than at any of the business cycle troughs before 1982. In other words, the decline to date has been large, but the level of unemployment severity remains high (see Chart A).

The Severity Index has lagged at nearly all business cycle troughs and has led nearly all the business cycle peaks since 1949 (Table D). In the current recovery the index began its descent seven months after the November 1982 business cycle trough, a lag very close to the average of six months. So far there is no clear sign that the downswing has ended, although the rate of decline has diminished as it usually does.

1/ For further analysis see John P. Cullity, Signals of Cyclical Movements in Inflation and Interest Rates, Center for International Business Cycle Research, June 1986.

2/ For a similar measure see Paul B. Manchester, "A New Measure of Labor Market Distress," Challenge, Nov.-Dec. 1982, p. 64. Manchester multiplied the average duration of unemployment by the number of unemployed instead of by the unemployment rate. His measure, therefore, tends to rise as the labor force grows.

TABLE C.

UNEMPLOYMENT SEVERITY DURING BUSINESS CYCLES, 1948-1982

Business Cycle Trough Date	Unemployment Severity Index*	Business Cycle Peak Date	Unemployment Severity Index*	Percent Change in Un-Employment Severity from Business Cycle	
				Trough to Peak	Peak to Trough
		11/48	29		
10/49	85	7/53	20	-76	193
5/54	66	8/57	42	-36	230
4/58	87	4/60	64	-26	107
2/61	91	12/69	27	-70	42
11/70	53	11/73	48	-9	96
3/75	99	1/80	64	-35	106
7/80	91	7/81	98	+7	42
11/82	181				85
Average	94		49	-35	113

*Weeks of unemployment per 100 persons in labor force.

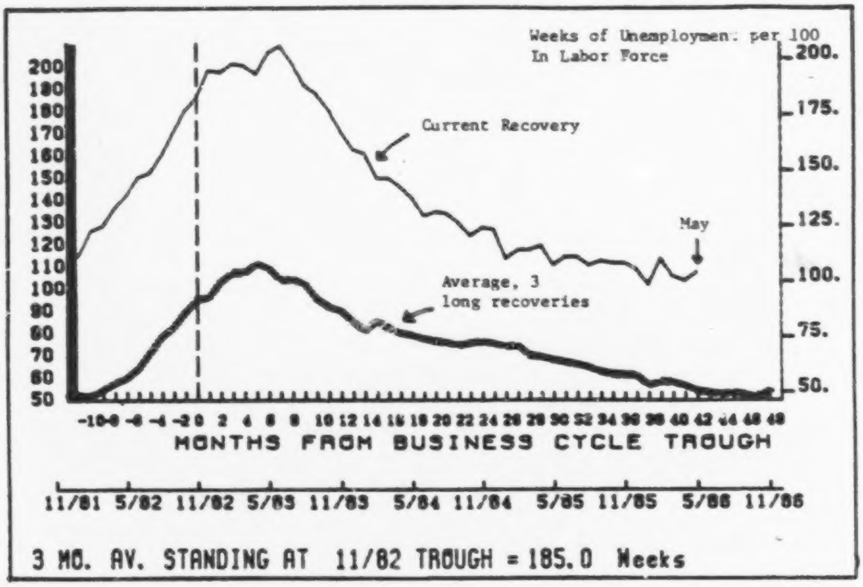
TABLE D.

LEADS AND LAGS OF UNEMPLOYMENT SEVERITY INDEX

Business Cycle		Unemployment Severity Index		Lead(-) or Lag(+) in Months, at Business Cycle	
Trough	Peak	Trough	Peak	Trough	Peak
10/49		10/49		0	
	7/53		7/53		0
5/54		9/54		+4	
	8/57		3/57		-5
4/58		9/58		+5	
	4/60		5/60		+1
2/61		7/61		+5	
	12/69		5/69		-7
11/70		10/71		+11	
	11/73		9/73		-2
3/75		11/75		+8	
	1/80		7/79		-6
7/80		n.c.			
	7/81		n.c.		
11/82		6/83		+7	
Mean				+6	-3
Median				+5	-4

n.c. = no cycle.

Chart A. INDEX OF UNEMPLOYMENT SEVERITY



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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 43 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Actual Levels

		Unit	Months After Business Cycle Trough	Expansions Starting OCT. 1949	FEB. 1961	MAR. 1975	Average (1949, 1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	COMPOSITE INDEXES								
6.	Business Week Leading Index, Growth Rate	%	43	-0.70	6.00	8.00	4.40	13.10	June 14
7.	Leading Employment Index, Growth Rate	%	42	5.90	8.00	4.90	6.30	2.10	May
8.	Coincident Employment Index, Growth Rate	%	42	7.60	6.60	9.40	7.90	3.40	May
9.	Leading Index, Growth Rate.	%	41	7.50	7.50	3.60	6.20	8.70	April
10.	Coincident Index, Growth Rate	%	41	12.80	7.40	8.80	9.70	4.00	April
11.	Diffusion Index of Leading Indicators	% Rising	41	n.a.	77.00	68.00	72.00	67.00	April
13.	Ratio, Coincident to Lagging Index	1967=100	41	120.00	97.70	127.10	114.90	123.80	April
15.	Eight-Country Leading Index, Growth Rate	%	40	n.a.	3.60	6.70	5.20	1.50	March
II.	OUTPUT, INCOME AND SALES								
17.	Real GNP Growth Rate	%	13Q	6.00	5.40	6.80	6.10	2.10	Q1
III.	EMPLOYMENT AND UNEMPLOYMENT								
23.	Employment to Population Ratio	%	42	58.40	56.40	59.90	58.20	60.90	May
28.	Employment Diffusion Index, 186 Indus.	% Rising	42	85.00	65.60	79.80	76.80	50.50	May
29.	Unemployment Rate: Total	%	42	2.60	4.90	5.90	4.50	7.20	May
30.	Unemployment Rate: Insured	%	42	2.50	3.50	3.10	3.00	2.80	May
32.	Short-Duration Unemployment Rate	%	42	2.50	3.70	4.60	3.60	5.40	May
33.	Layoff Rate	%	42	0.26	0.35	0.38	0.33	0.52	May
34.	Part-time Employment Ratio	%	42	n.a.	3.20	3.70	3.50	2.30	May
IV.	INVESTMENT COMMITMENTS AND INVENTORIES								
41.	Inventory/Sales Ratio	%	40	1.53	1.45	1.57	1.52	1.57	March
42.	Change in Inventories on Hand & on Order	Bil. 82$.	40	46.10	23.90	42.40	37.50	29.50	March
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS								
43.	Output per Hour, Growth Rate	%	13Q	2.10	3.90	1.30	2.40	0.30	Q1
44.	Unit Labor Costs, Growth Rate	%	13Q	4.00	0.60	6.80	11.40	2.50	Q1
45.	Hourly Compensation, Growth Rate	%	13Q	5.90	4.50	8.30	6.20	2.80	Q1
46.	Real Hourly Compensation, Growth Rate	%	13Q	5.80	3.30	0.60	3.20	0.00	Q1
47.	Selling Price Index, Growth Rate	%	13Q	2.80	1.30	7.00	3.70	2.50	Q1
48.	Growth in Prices minus Growth in Costs	% Points	13Q	-1.20	0.70	0.20	-0.10	0.00	Q1
49.	Corporate Profit Margin	%	13Q	10.10	12.60	8.70	10.50	10.00	Q1
50.	Price/Labor Cost Ratio	1977=100	13Q	99.00	100.60	99.80	99.80	98.30	Q1
54.	Consumer Price Index, Growth Rate	%	42	0.50	0.80	8.60	3.30	0.60	May
56.	Industrial Mat. Price Index, Growth Rate	%	43	-14.70	10.00	23.70	6.30	-1.20	June 20
57.	Import Prices, Growth Rate	%	39	-8.10	2.20	9.60	1.20	-8.30	Q1(March)
58.	Anticipated Selling Prices (D&B Survey)	% Rising	39	n.a.	58.00	89.00	74.00	64.00	Q1(March)
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES								
59.	Business & Consumer Debt, Growth Rate	%	41	16.60	12.00	16.00	14.90	6.10	April
60.	Federal Debt, Growth Rate	%	42	0.80	2.60	10.50	4.60	17.00	May
61.	Total Debt, Growth Rate	%	41	6.50	8.10	14.80	9.80	9.10	April
62.	Money Supply (M1), Growth Rate	%	43	2.70	5.10	7.90	5.20	14.20	June 16
63.	Money Supply (M2), Growth Rate	%	43	4.10	8.20	8.20	6.80	7.90	June 16
64.	Treasury Bill Rate (3-Month)	%	42	2.20	3.50	7.90	4.50	6.10	May
65.	New Corporate Bond Yield (AA)	%	42	3.50	4.40	8.80	5.60	9.00	May

TABLE 2

RECESSION-RECOVERY STATUS UP TO 43 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Percentage Change from Trough Levels

		Months After Business Cycle Trough	Expansions Starting OCT. 1949	FEB. 1961	MAR. 1975	Average (1949, 1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available.
I.	COMPOSITE INDEXES							
1.	Business Week Leading Index (CIBCR)	43	20.50 %	25.30 %	30.30 %	25.40 %	34.10 %	June 14
2.	Leading Employment Index (CIBCR)	42	30.10 %	25.40 %	25.30 %	26.90 %	23.10 %	May
3.	Coincident Employment Index (CIBCR)	42	41.10 %	21.30 %	34.40 %	32.30 %	30.10 %	May
4.	Leading Index (BCD)	41	18.20 %	26.70 %	34.40 %	26.40 %	28.30 %	April
5.	Coincident Index (BCD)	41	39.00 %	22.20 %	28.40 %	29.90 %	24.20 %	April
12.	Lagging Index (BCD)	41	37.90 %	9.70 %	-2.40 %	15.10 %	12.40 %	April
14.	Eight-Country Leading Index (CIBCR)	40	n.a.	11.30 %	19.90 %	15.60 %	20.00 %	March
II.	OUTPUT, INCOME AND SALES							
16.	Real GNP	13Q	29.70 %	17.60 %	17.90 %	21.70 %	14.50 %	Q1
18.	Industrial Production Index	42	45.00 %	30.90 %	30.90 %	35.60 %	23.50 %	May
19.	Real Personal Income	41	24.20 %	16.50 %	16.40 %	19.00 %	14.10 %	April
20.	Real Consumer Expenditures	41	14.70 %	17.00 %	17.40 %	16.40 %	14.30 %	April
21.	Real Retail Sales	41	14.80 %	17.20 %	19.90 %	17.30 %	21.50 %	April
III.	EMPLOYMENT AND UNEMPLOYMENT							
22.	Total Employment	42	8.40 %	5.70 %	13.10 %	9.10 %	9.90 %	May
24.	Nonfarm Employment	42	16.50 %	9.50 %	14.30 %	13.40 %	12.70 %	May
25.	Nonfarm Employee-Hours	42	18.00 %	9.80 %	14.10 %	14.00 %	13.60 %	May
26.	Employment in Goods-Producing Industries.	42	24.30 %	7.50 %	14.70 %	15.50 %	8.70 %	May
27.	Employment in Service-Producing Industries	42	11.40 %	10.60 %	14.20 %	12.10 %	14.00 %	May
31.	Initial Claims, Unemployment Insurance	42	51.10 %	60.90 %	60.60 %	57.50 %	65.10 %	May
35.	Average Workweek, Manufacturing	42	4.70 %	4.10 %	4.20 %	4.30 %	4.10 %	May
36.	Overtime Hours, Manufacturing	42	n.a.	57.10 %	50.00 %	53.60 %	47.80 %	May
IV.	INVESTMENT COMMITMENTS AND INVENTORIES							
37.	New Private Housing Starts	41	-10.50 %	25.90 %	106.30 %	44.60 %	56.60 %	April
38.	New Private Housing Permits	41	-19.70 %	28.60 %	106.40 %	38.40 %	51.50 %	April
39.	Contract & Orders, Plant & Equipment	41	53.20 %	52.90 %	50.80 %	52.30 %	31.20 %	April
40.	New Capital Appropriations, Manufacturing	13Q	n.a.	85.90 %	5.50 %	47.50 %	13.20 %	Q1
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS							
51.	Business Failures, Liabilities $100,000+	42	20.00 %	-8.30 %	-31.10 %	-6.50 %	1.20 %	May
52.	Leading Index of Inflation (CIBCR)	41	18.40 %	6.60 %	20.00 %	15.00 %	6.00 %	May
53.	Consumer Price Index, All Urban Consumers	42	12.90 %	3.90 %	25.40 %	14.10 %	11.10 %	May
55.	Industrial Materials Price Index	43	4.10 %	1.50 %	33.80 %	13.10 %	7.00 %	June 20
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES							
66.	Stock Price Index (S&P 500)	42	56.10 %	32.30 %	25.30 %	37.90 %	74.40 %	May

TABLE 3

RECESSION-RECOVERY STATUS UP TO 43 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions	Starting		Average	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
				OCT. 1949	FEB. 1961	MAR. 1975	(1949, 1961, 1975)		
I.	COMPOSITE INDEXES								
6.	Business Week Leading Index, Growth Rate	%	43	-5.20	-0.60	13.30	2.50	8.40	June 14
7.	Leading Employment Index, Growth Rate	%	42	7.20	10.20	14.70	10.70	0.80	May
8.	Coincident Employment Index, Growth Rate	%	42	21.50	14.70	26.10	20.80	11.20	May
9.	Leading Index, Growth Rate.	%	41	-2.40	6.20	17.10	7.00	4.00	April
10.	Coincident Index, Growth Rate	%	41	20.00	14.10	23.90	19.30	10.80	April
11.	Diffusion Index of Leading Indicators	% Rising	41	n.a.	40.00	50.00	45.00	20.00	April
13.	Ratio, Coincident to Lagging Index	1967=100	41	0.90	10.00	30.40	13.80	11.60	April
15.	Eight-Country Leading Index, Growth Rate	%	40	n.a.	-0.50	18.20	8.90	1.00	March
II.	OUTPUT, INCOME AND SALES								
17.	Real GNP Growth Rate	%	13Q	7.60	4.80	11.80	8.10	3.20	Q1
III.	EMPLOYMENT AND UNEMPLOYMENT								
23.	Employment to Population Ratio	%	42	2.90	0.10	3.40	2.40	3.20	May
28.	Employment Diffusion Index, 186 Indus.	% Rising	42	57.80	54.60	62.50	58.30	31.80	May
29.	Unemployment Rate: Total	%	42	-4.20	-1.70	-2.40	-2.80	-3.30	May
30.	Unemployment Rate: Insured	%	42	-4.90	-2.80	-3.20	-3.60	-2.20	May
32.	Short-Duration Unemployment Rate	%	42	-2.70	-1.00	-1.40	-1.70	-1.10	May
33.	Layoff Rate	%	42	-0.38	-0.29	-0.47	-0.38	-0.38	May
34.	Part-time Employment Ratio	%	42	n.a.	1.50	0.80	1.20	0.40	May
IV.	INVESTMENT COMMITMENTS AND INVENTORIES								
41.	Inventory/Sales Ratio	%	40	0.01	-0.10	-0.16	-0.08	-0.14	March
42.	Change in Inventories on Hand & on Order	Bil. 82$.	40	43.50	48.90	101.70	64.70	68.60	March
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS								
43.	Output per Hour, Growth Rate	%	13Q	1.20	2.10	1.80	1.70	-1.00	Q1
44.	Unit Labor Costs, Growth Rate	%	13Q	4.00	-0.40	-4.90	-0.40	-2.60	Q1
45.	Hourly Compensation, Growth Rate	%	13Q	5.10	1.80	-2.80	1.40	-3.70	Q1
46.	Real Hourly Compensation, Growth Rate	%	13Q	3.00	1.70	0.40	1.70	-2.30	Q1
47.	Selling Price Index, Growth Rate	%	13Q	3.70	1.60	-6.20	-0.30	-1.80	Q1
48.	Growth in Prices minus Growth in Costs	% Points	13Q	-0.30	2.00	-1.30	0.10	0.80	Q1
49.	Corporate Profit Margin	%	13Q	-3.00	3.40	3.00	1.10	6.10	Q1
50.	Price/Labor Cost Ratio	1977=100	13Q	0.30	4.00	2.60	2.30	2.80	Q1
54.	Consumer Price Index, Growth Rate	%	42	2.20	-0.70	-2.10	-0.20	-3.50	May
56.	Industrial Mat. Price Index, Growth Rate	%	43	1.40	12.50	51.50	21.80	16.70	June 20
57.	Import Prices, Growth Rate	%	40	-2.80	4.00	-2.20	-0.30	-6.50	Q1(March)
58.	Anticipated Selling Prices (D&B Survey)	% Rising	40	n.a.	3.00	13.30	8.20	-3.70	Q1(March)
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES								
59.	Business & Consumer Debt, Growth Rate	%	41	13.30	4.40	10.00	9.20	6.30	April
60.	Federal Debt, Growth Rate	%	42	-0.60	3.10	-0.80	0.60	-2.70	May
61.	Total Debt, Growth Rate	%	41	4.60	4.30	7.60	5.50	4.20	April
62.	Money Supply (M1), Growth Rate	%	43	3.40	3.50	4.20	3.70	4.60	June 16
63.	Money Supply (M2), Growth Rate	%	43	4.40	1.70	0.70	2.30	-1.90	June 16
64.	Treasury Bill Rate (3-Month)	%	42	1.10	1.20	2.30	1.50	-1.80	May
65.	New Corporate Bond Yield (AA)	%	42	1.10	0.00	-0.60	0.20	-3.30	May

RECESSION-RECOVERY PATTERNS

——————— Current recovery to date (business cycle trough: November 1982 or IV Q 1982)

┼┼┼┼┼┼┼┼┼┼┼ Average of three long recoveries (1949-53, 1961-69, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average previous recovery developed beyond the present point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background. One can see easily where new figures or forecasts would be placed.

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side of most charts is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the trough standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the three cycles, 1949-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, ratios or changes (e.g., the unemployment rate or GNP growth rate, employment to population ratio, or change in inventories), the charts show actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle. This scale shows how the averages for previous recoveries translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference.

The averages, which extend out to four years after the trough, include three recoveries: 1949-53, 1961-69 and 1975-80. The 1954-57, 1958-60, 1970-73 and 1980-81 recoveries, which lasted 39, 24, 36 and 12 months respectively, are excluded to avoid including the subsequent recessions in the averages.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in the preceding three tables.

In the charts, growth rate is abbreviated "G.R."

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover sixty-three indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, all previous expansions since 1948 (or whenever after 1948 the indicator begins), and the average of three long expansions. The three long expansions are: 1949-53, 45 months; 1961-69, 106 months; 1975-80, 58 months. The expansions that are excluded from the averages covered the following periods: 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, November 1985, which is 36 months after the November 1982 business cycle trough, all the entries for that indicator will be for 36 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

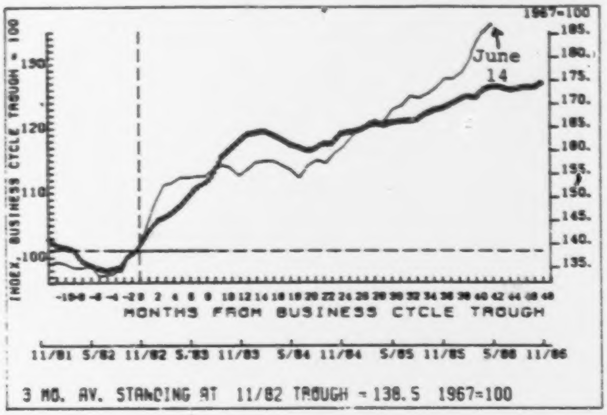
The tables pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending four years after the trough. The average recovery is also shown for each month of the five-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

To order the 100-page 1986 Supplement, send in the order form on the back cover.

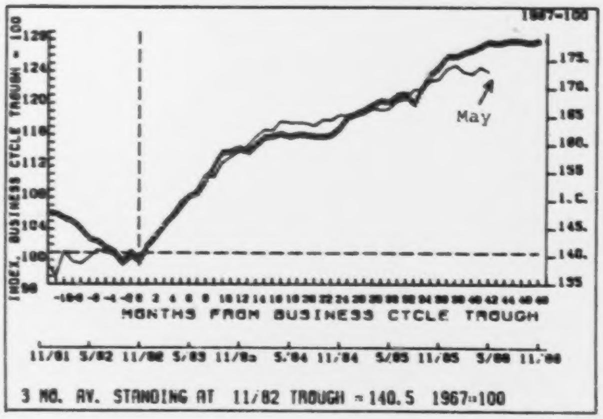
COMPOSITE INDEXES

1. BUSINESS WEEK LEADING INDEX (CIBCR)



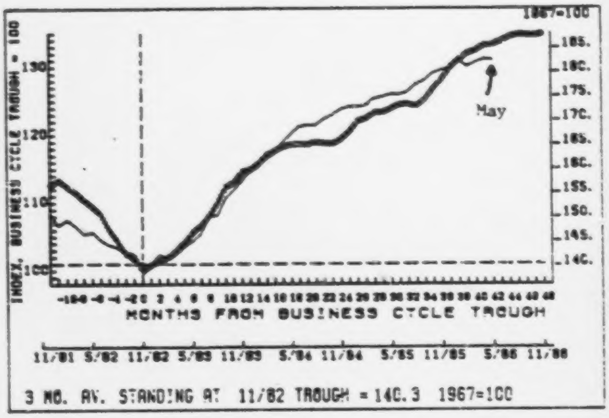
3 MO. AV. STANDING AT 11/82 TROUGH = 138.5 1967=100

2. LEADING EMPLOYMENT INDEX (CIBCR)



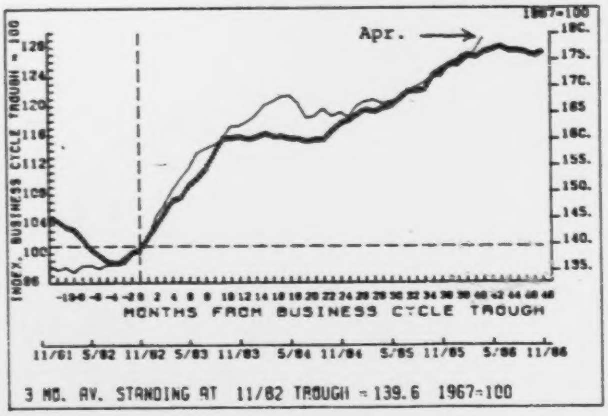
3 MO. AV. STANDING AT 11/82 TROUGH = 140.5 1967=100

3. COINCIDENT EMPLOYMENT INDEX (CIBCR)



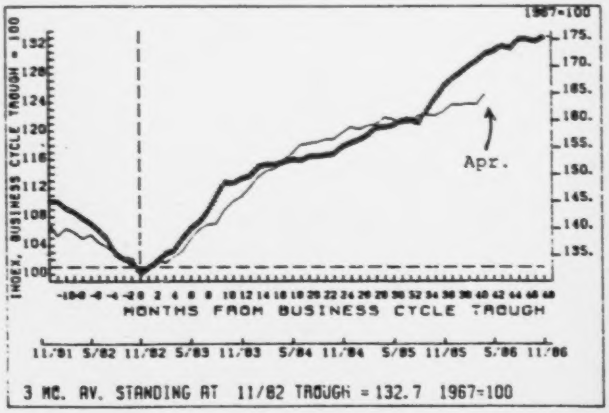
3 MO. AV. STANDING AT 11/82 TROUGH = 140.3 1967=100

4. LEADING INDEX (BCD)



3 MO. AV. STANDING AT 11/82 TROUGH = 139.6 1967=100

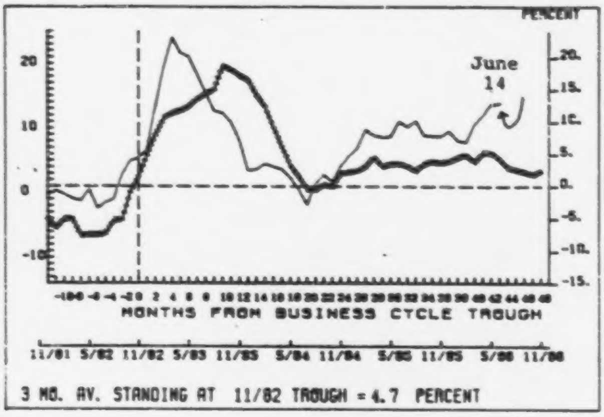
5. COINCIDENT INDEX (BCD)



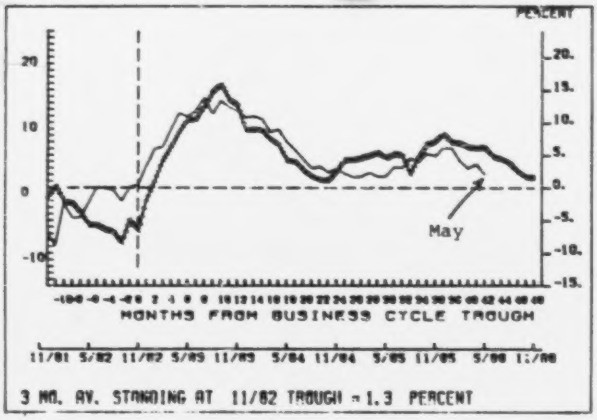
3 MO. AV. STANDING AT 11/82 TROUGH = 132.7 1967=100

COMPOSITE INDEX GROWTH RATES

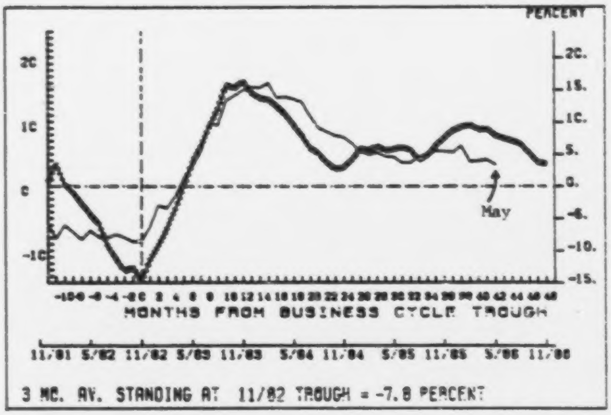
6. BUSINESS WEEK LEADING INDEX, G.R.



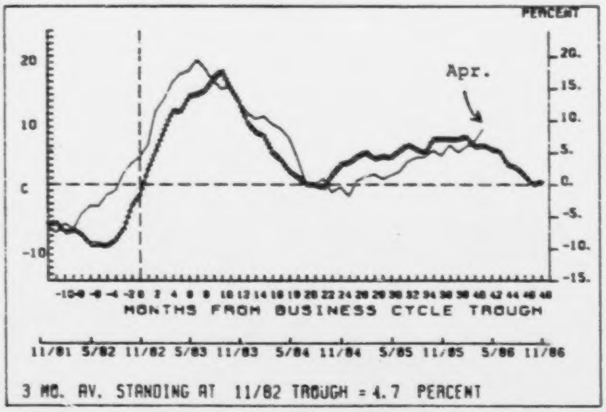
7. LEADING EMPLOYMENT INDEX, G.R.



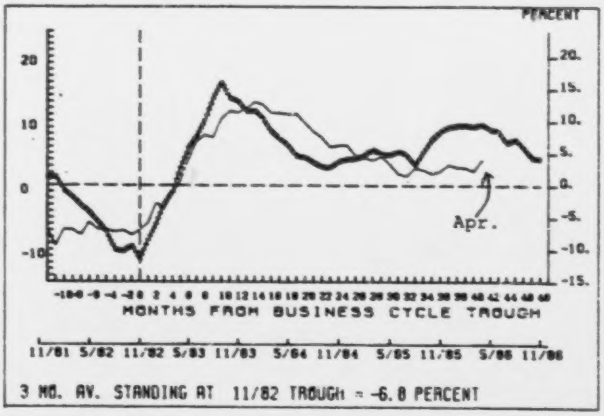
8. COINCIDENT EMPLOYMENT INDEX, G.R.



9. LEADING INDEX, G.R. (BCD)

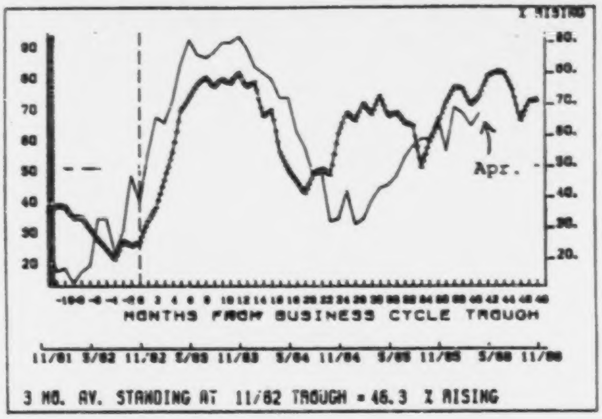


10. COINCIDENT INDEX, G.R. (BCD)



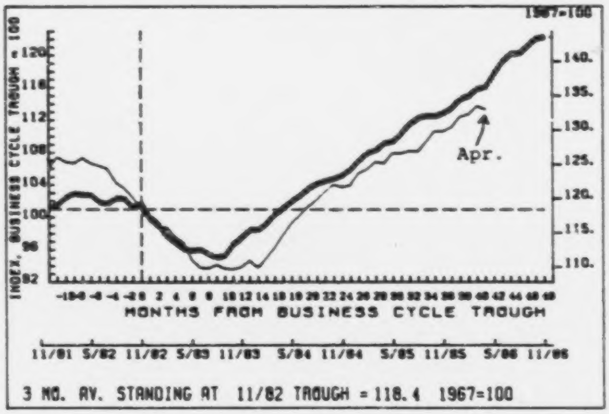
OTHER COMPOSITE INDEXES

11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



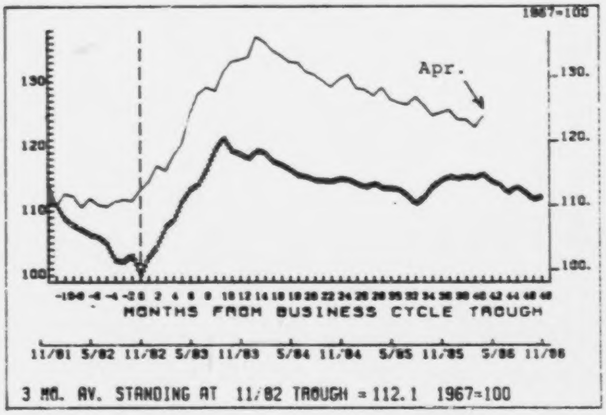
3 MO. AV. STANDING AT 11/82 TROUGH = 46.3 % RISING

12. LAGGING INDEX (BCD)



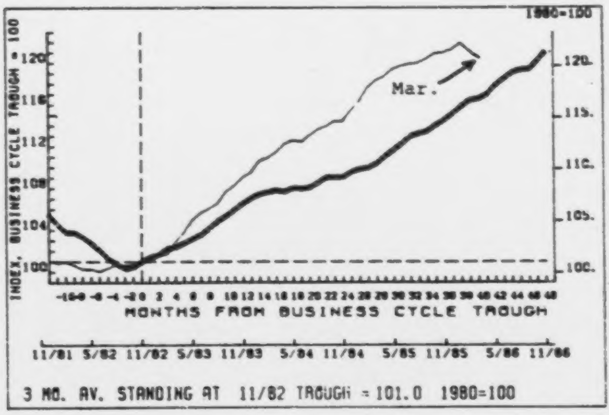
3 MO. AV. STANDING AT 11/82 TROUGH = 118.4 1967=100

13. RATIO, COINC. TO LAGGING INDEX



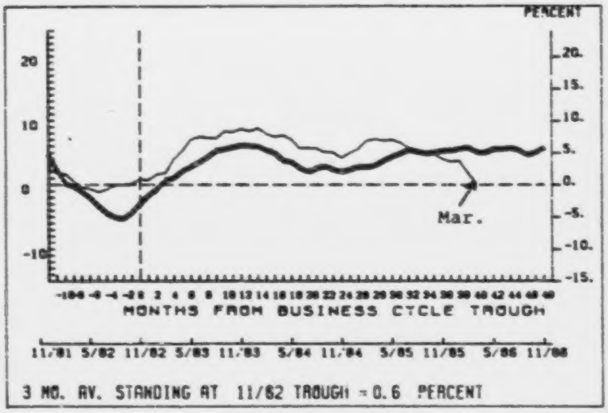
3 MO. AV. STANDING AT 11/82 TROUGH = 112.1 1967=100

14. 8-COUNTRY LEADING INDEX (CIBCR)*



3 MO. AV. STANDING AT 11/82 TROUGH = 101.0 1980=100

15. EIGHT-COUNTRY LEADING INDEX, G.R.

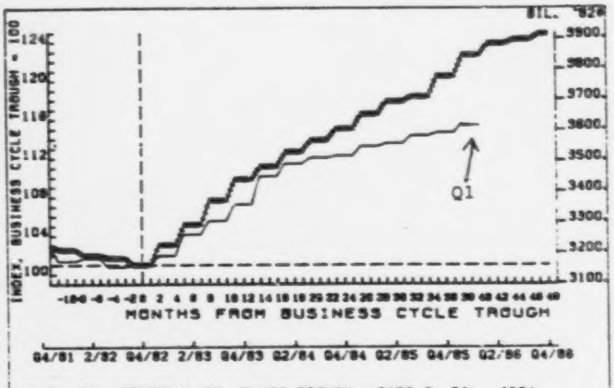


3 MO. AV. STANDING AT 11/82 TROUGH = 0.6 PERCENT

*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

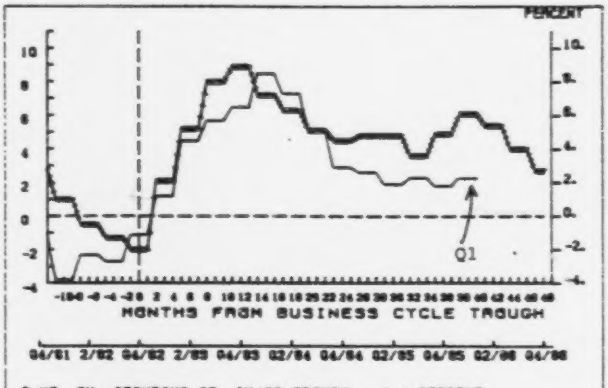
OUTPUT, INCOME AND SALES

16. REAL GNP



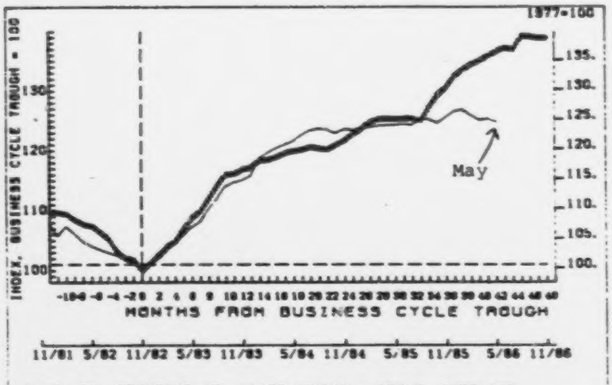
3 MO. AV. STANDING AT IV/82 TROUGH = 3159.3 BIL. '82$

17. REAL GNP, GROWTH RATE



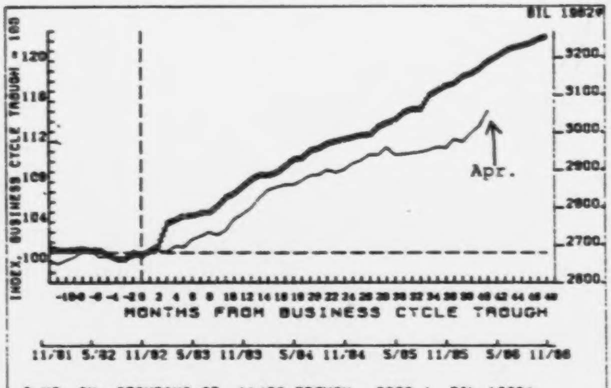
3 MO. AV. STANDING AT IV/82 TROUGH = -1.1 PERCENT

18. INDUSTRIAL PRODUCTION INDEX



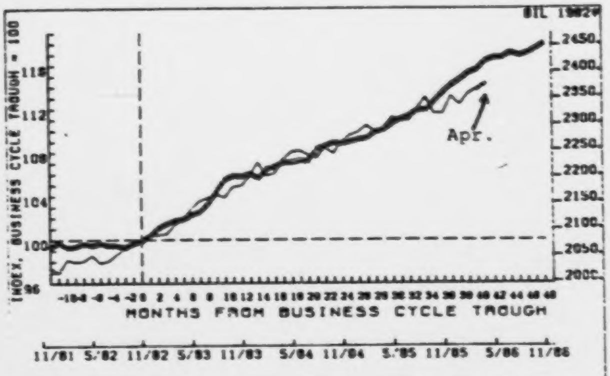
3 MO. AV. STANDING AT 11/82 TROUGH = 100.5 1977=100

19. REAL PERSONAL INCOME



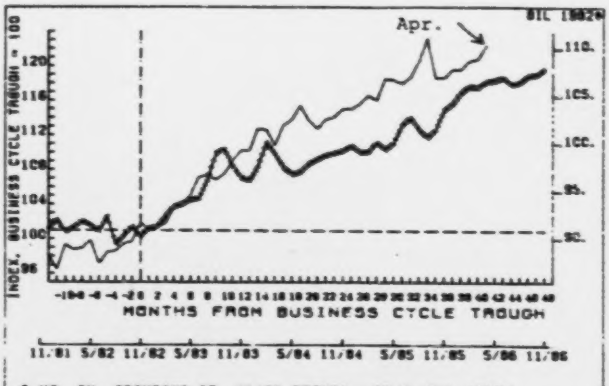
3 MO. AV. STANDING AT 11/82 TROUGH = 2680.1 BIL 1982$

20. REAL CONSUMER EXPENDITURES



3 MO. AV. STANDING AT 11/82 TROUGH = 2078.7 BIL 1982$

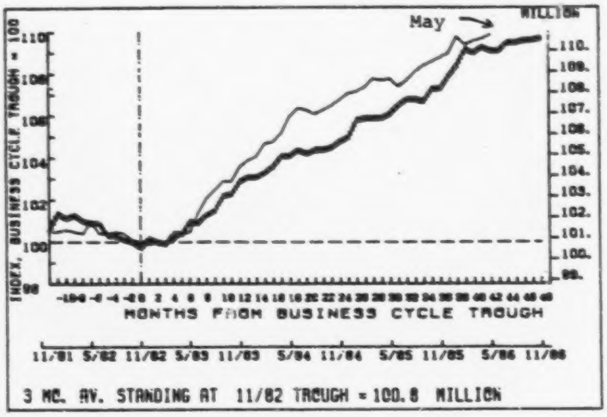
21. REAL RETAIL SALES



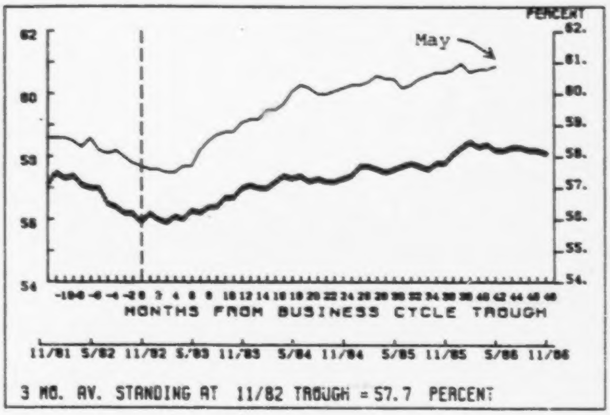
3 MO. AV. STANDING AT 11/82 TROUGH = 90.8 BIL 1982$

EMPLOYMENT

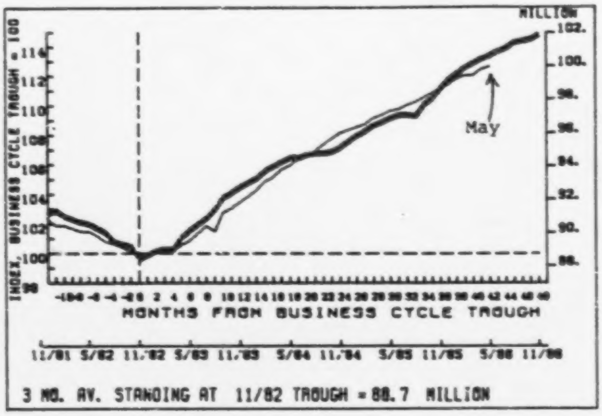
22. TOTAL EMPLOYMENT



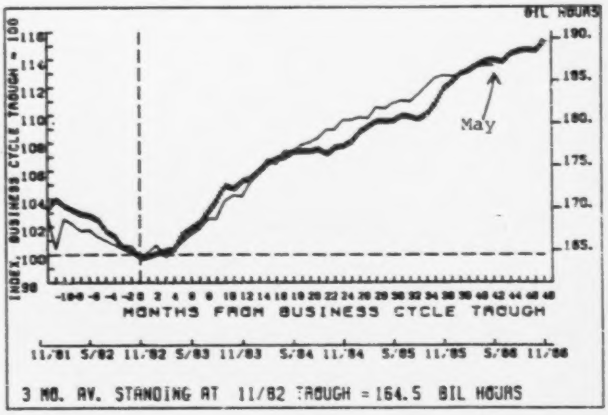
23. EMPLOYMENT TO POPULATION RATIO



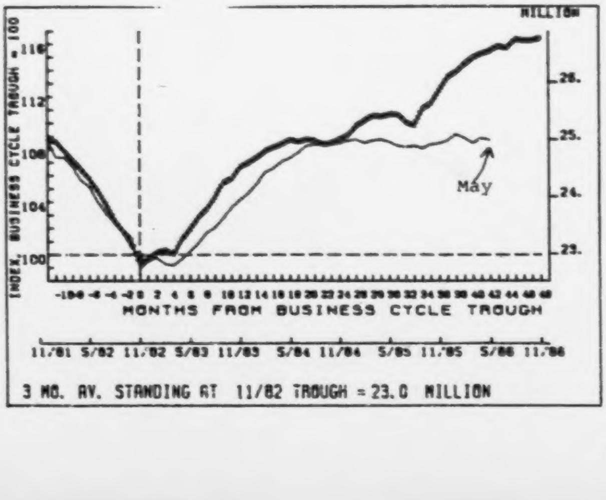
24. NONFARM EMPLOYMENT



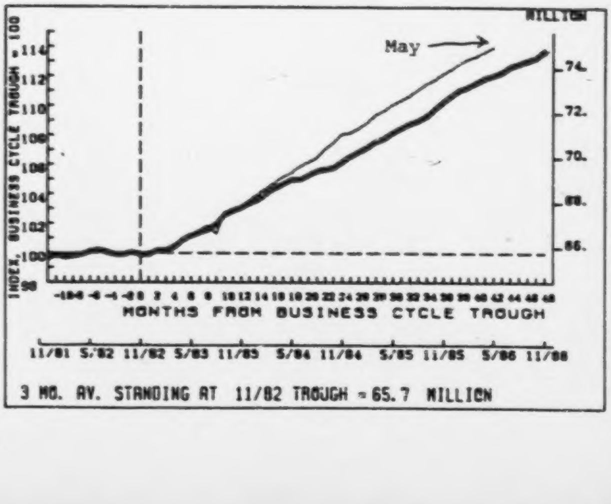
25. NONFARM EMPLOYEE HOURS



26. EMPLOYMENT IN GOODS-PROD. INDUS.

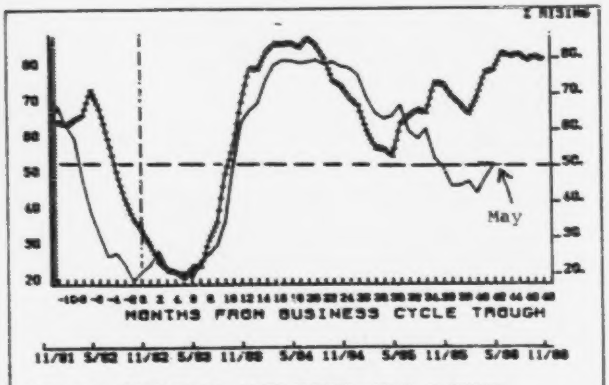


27. EMPLOYMENT IN SERVICE-PROD. INDUS.



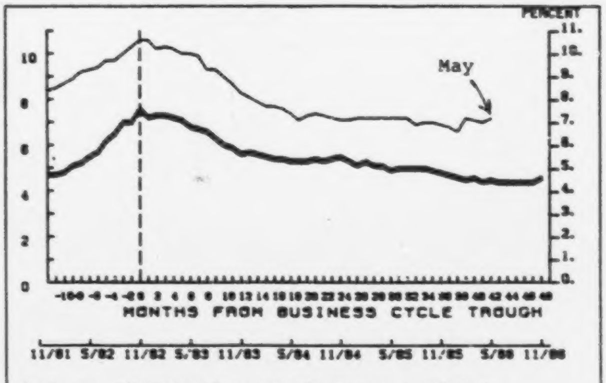
UNEMPLOYMENT

28. EMPLOY. DIFFUS. INDEX, 186 INDUS.



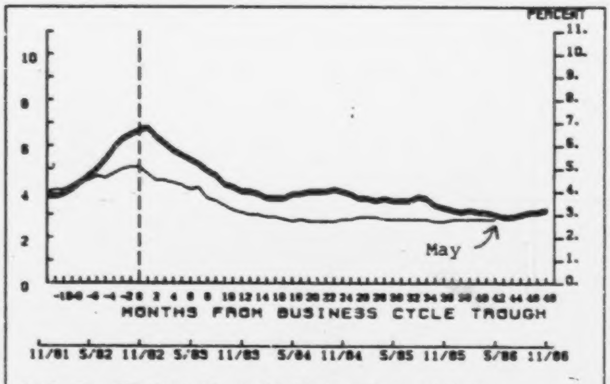
3 MO. AV. STANDING AT 11/82 TROUGH = 20.5 % RISING

29. UNEMPLOYMENT RATE: TOTAL



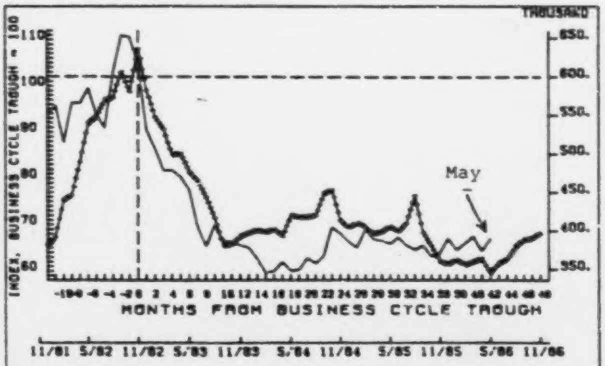
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

30. UNEMPLOYMENT RATE: INSURED



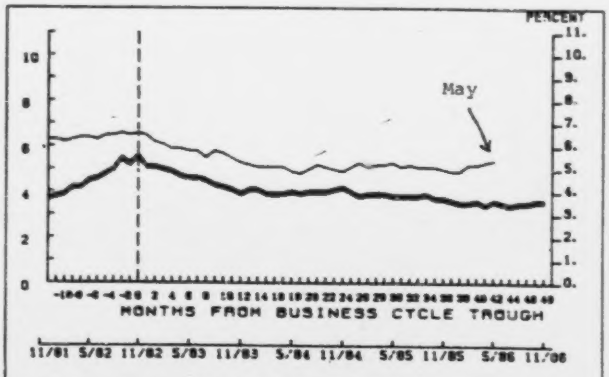
3 MO. AV. STANDING AT 11/82 TROUGH = 5.0 PERCENT

31. INITIAL CLAIMS, UNEMPLOY. INSUR.



3 MO. AV. STANDING AT 11/82 TROUGH = 599.3 THOUSAND

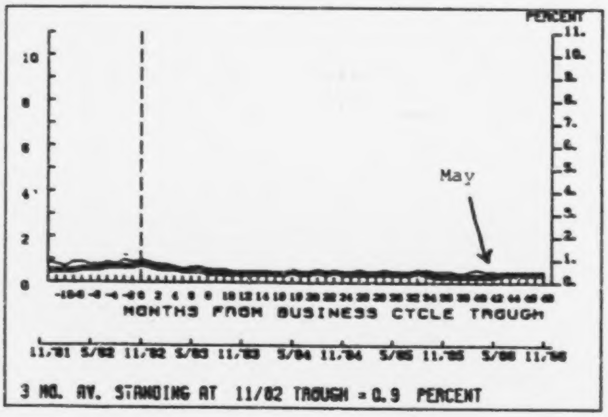
32. SHORT-DUR. UNEMPLOYMENT RATE



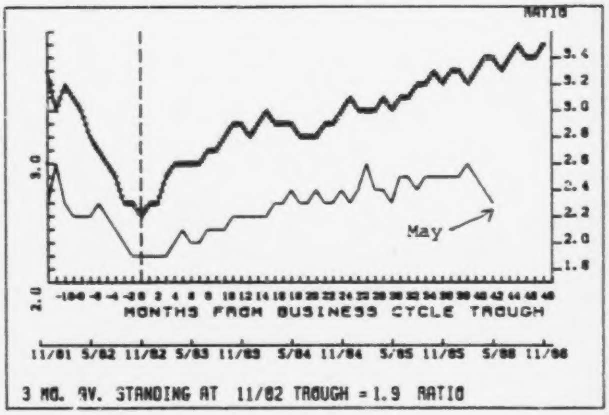
3 MO. AV. STANDING AT 11/82 TROUGH = 6.5 PERCENT

OTHER LEADING EMPLOYMENT INDICATORS

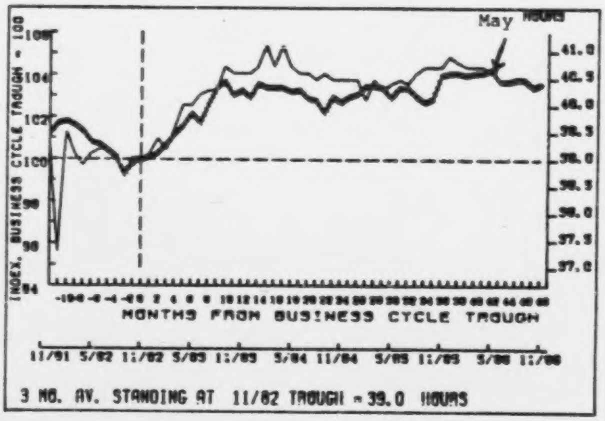
33. LAYOFF RATE



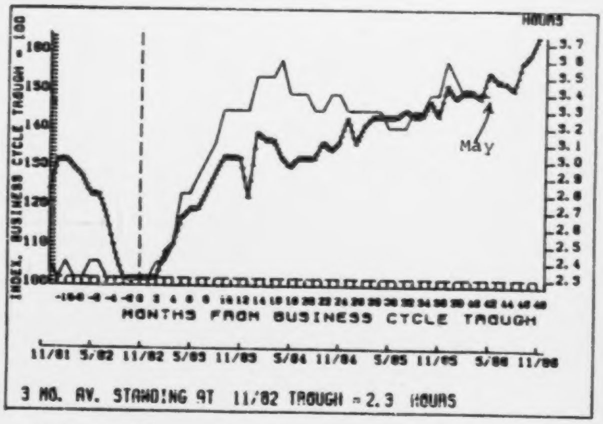
34. VOL. TO INVOL. PART-TIME EMPL. RATIO



35. AVERAGE WORKWEEK, MFG.

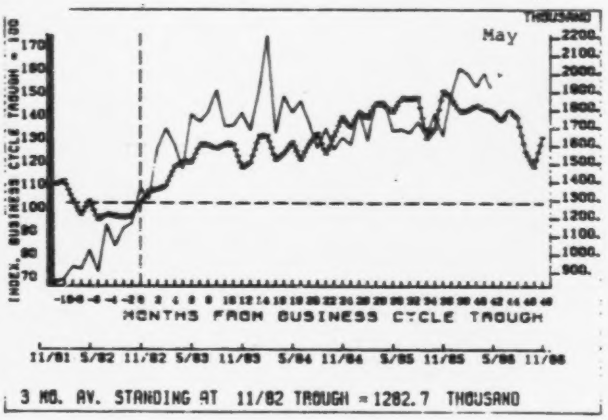


36. OVERTIME HOURS, MFG.



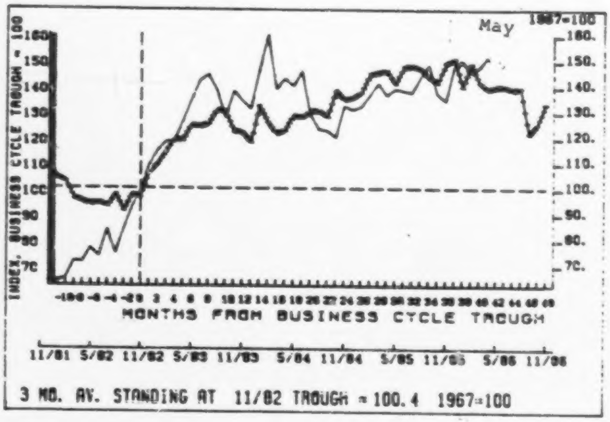
INVESTMENT COMMITMENTS AND INVENTORIES

37. NEW PRIVATE HOUSING STARTS



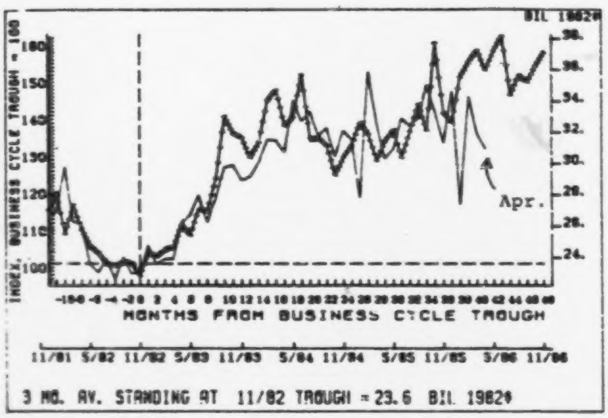
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

38. NEW PRIVATE HOUSING PERMITS



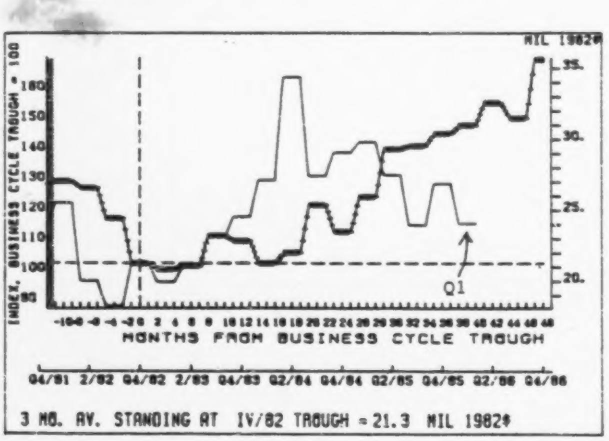
3 MO. AV. STANDING AT 11/82 TROUGH = 100.4 1967=100

39. CONTRACTS & ORDERS, PLANT & EQUIP.



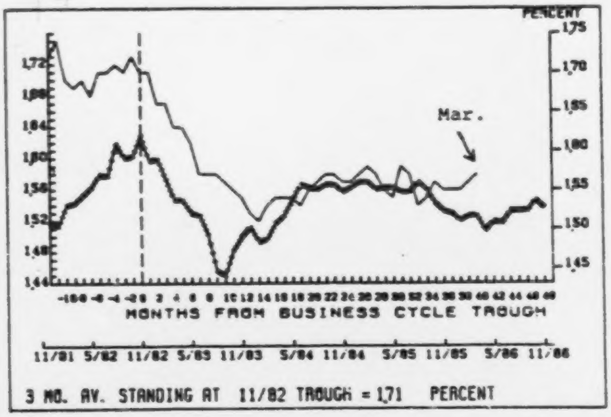
3 MO. AV. STANDING AT 11/82 TROUGH = 23.6 BIL 1982$

40. NEW CAPITAL APPROPRIATIONS, MFG.



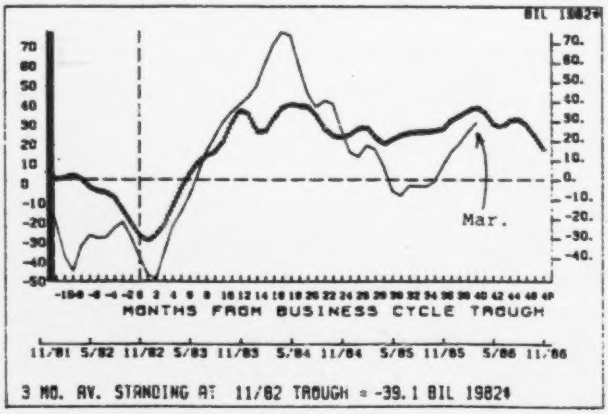
3 MO. AV. STANDING AT IV/82 TROUGH = 21.3 MIL 1982$

41. INV./SALES RATIO, MFG. AND TRADE



3 MO. AV. STANDING AT 11/82 TROUGH = 1.71 PERCENT

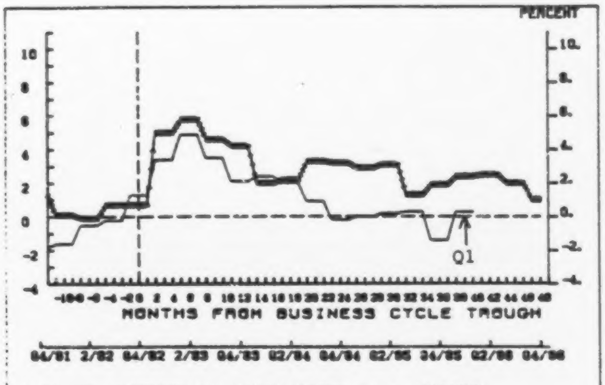
42. CHANGE IN INV. ON HAND & ON ORDER



3 MO. AV. STANDING AT 11/82 TROUGH = -39.1 BIL 1982$

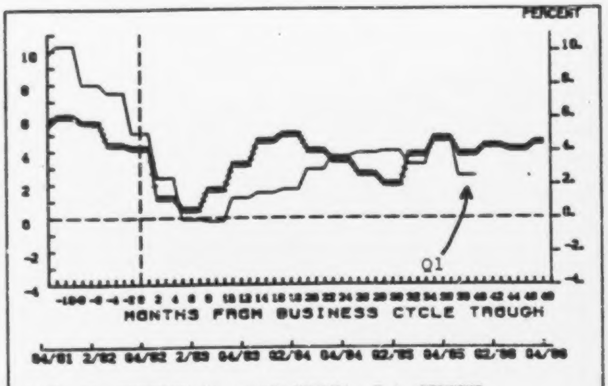
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

43. OUTPUT PER HOUR, G.R.



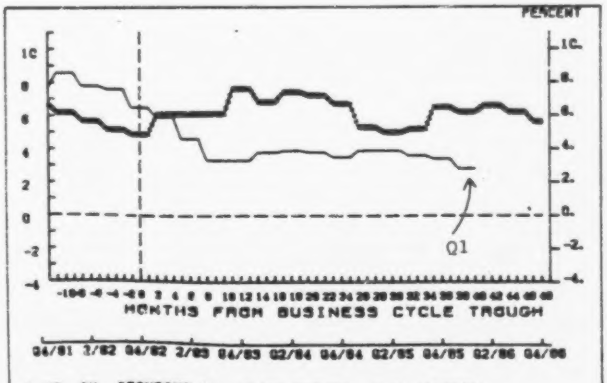
3 MO. AV. STANDING AT IV/82 TROUGH = 1.3 PERCENT

44. UNIT LABOR COSTS, G.R.



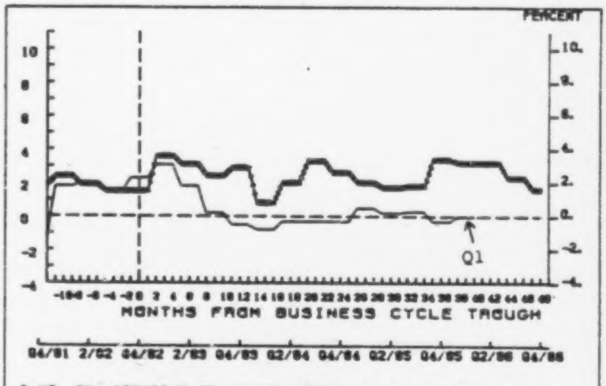
3 MO. AV. STANDING AT IV/82 TROUGH = 5.1 PERCENT

45. HOURLY COMPENSATION, G.R.



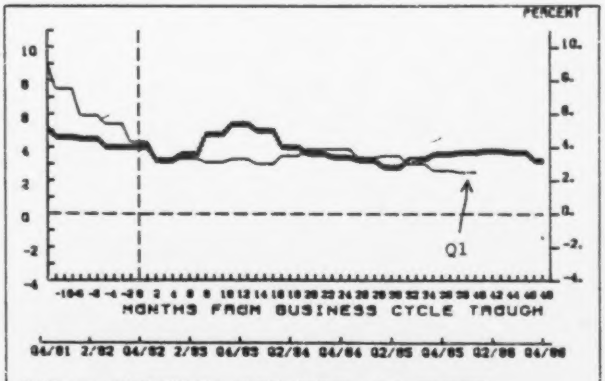
3 MO. AV. STANDING AT IV/82 TROUGH = 6.5 PERCENT

46. REAL HOURLY COMPENSATION, G.R.



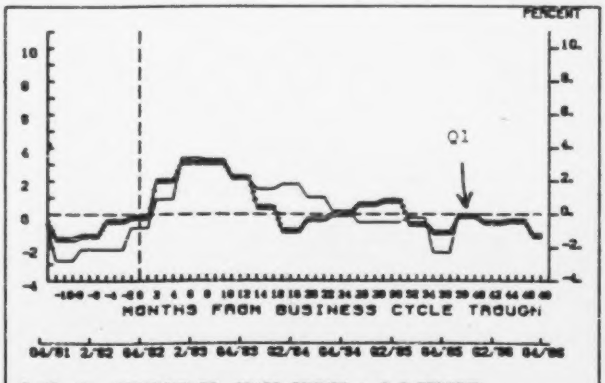
3 MO. AV. STANDING AT IV/82 TROUGH = 2.3 PERCENT

47. SELLING PRICE INDEX, G.R.



3 MO. AV. STANDING AT IV/82 TROUGH = 4.3 PERCENT

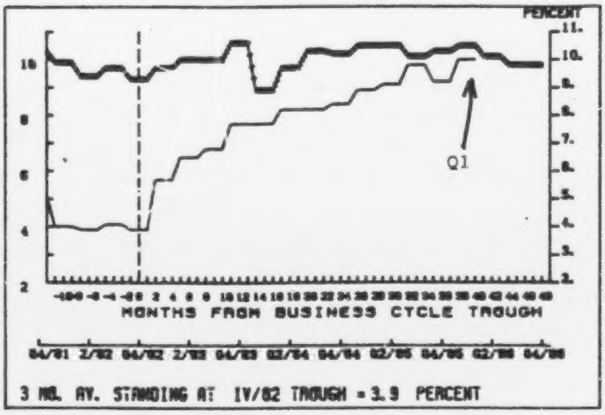
48. G.R. IN PRICES MINUS G.R. IN COSTS



3 MO. AV. STANDING AT IV/82 TROUGH = -0.8 PERCENT

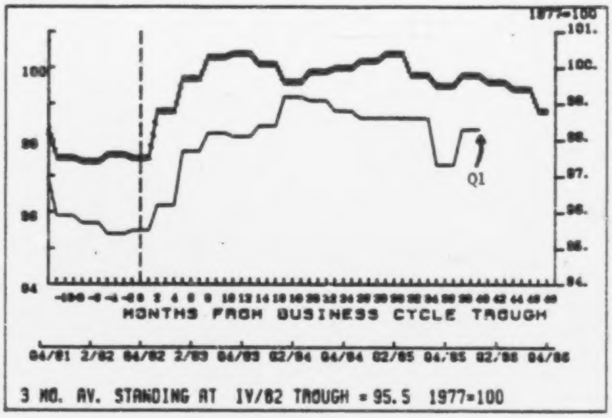
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

49. CORPORATE PROFIT MARGIN



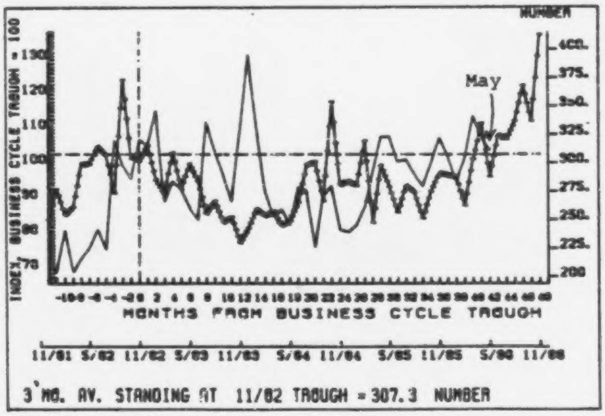
3 MO. AV. STANDING AT IV/82 TROUGH = 3.9 PERCENT

50. PRICE/LABOR COST RATIO



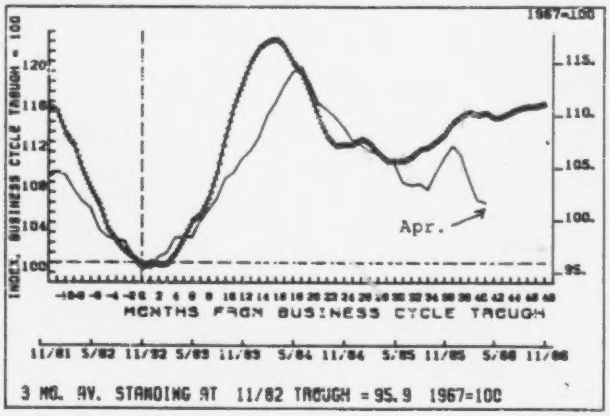
3 MO. AV. STANDING AT IV/82 TROUGH = 95.5 1977=100

51. BUSINESS FAILURES



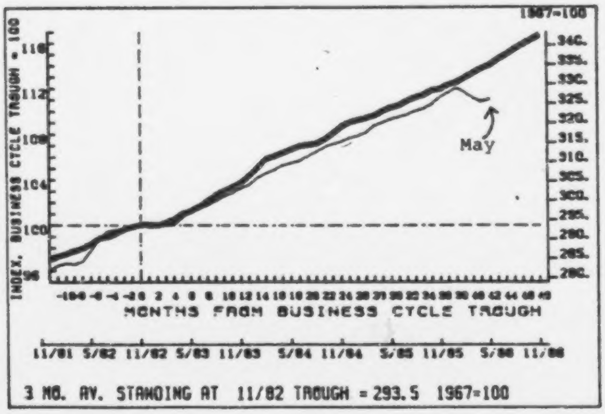
3 MO. AV. STANDING AT 11/82 TROUGH = 307.3 NUMBER

52. LEADING INDEX OF INFLATION (CIBCR)



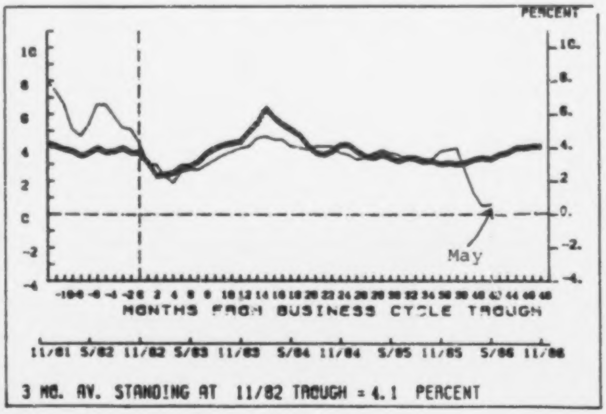
3 MO. AV. STANDING AT 11/82 TROUGH = 95.9 1967=100

53. CONSUMER PRICE INDEX



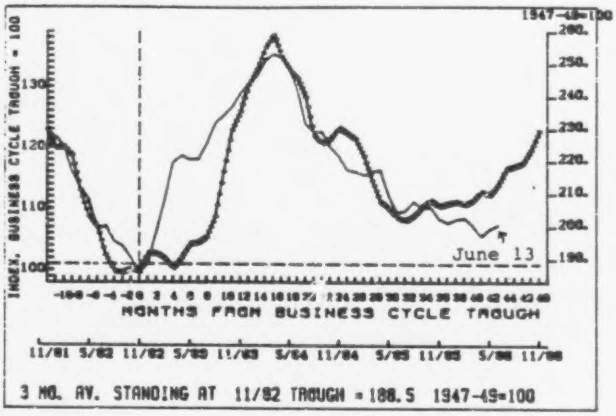
3 MO. AV. STANDING AT 11/82 TROUGH = 293.5 1967=100

54. CONSUMER PRICE INDEX, G.R.

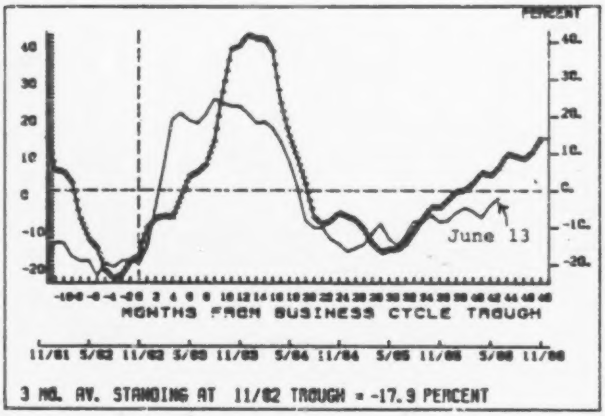


3 MO. AV. STANDING AT 11/82 TROUGH = 4.1 PERCENT

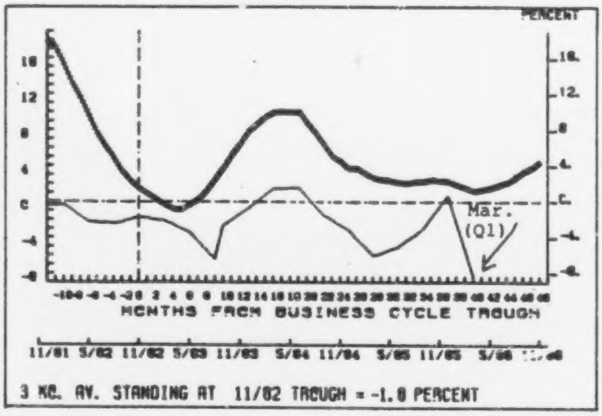
55. INDUSTRIAL MATERIALS PRICE INDEX



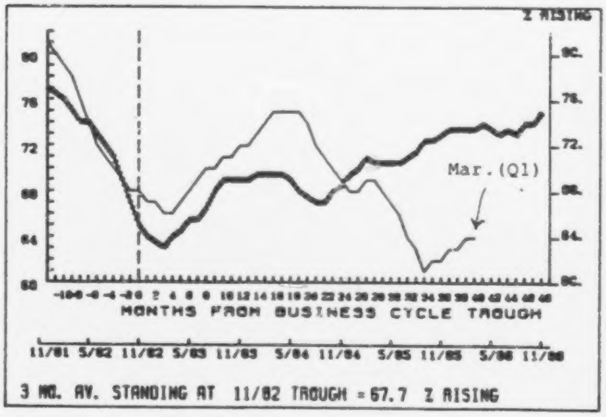
56. INDUS. MATERIALS PRICE INDEX, G.R.



57. IMPORT PRICE INDEX, G.R.

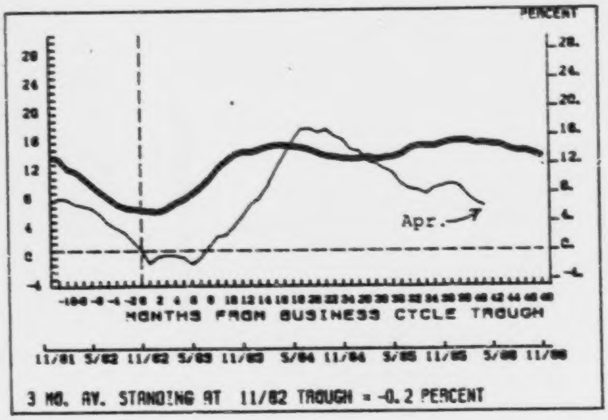


58. BUSINESSMEN'S ANTICPATED SELLING PRICES (SURVEY)

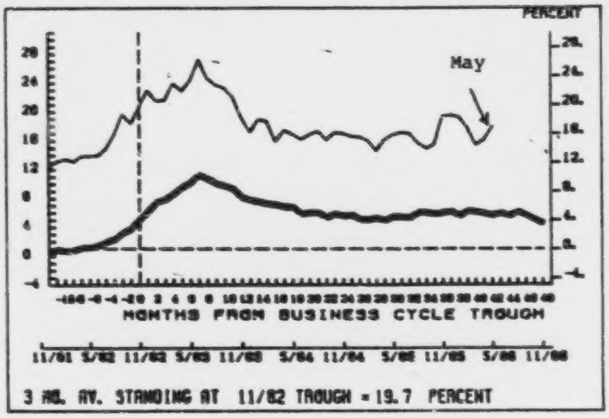


MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

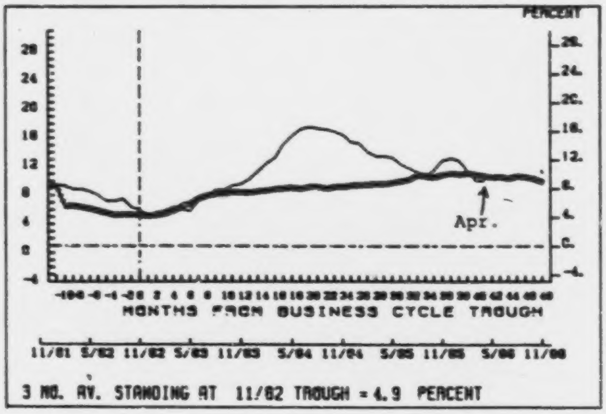
59. BUSINESS & CONSUMER DEBT, G.R.



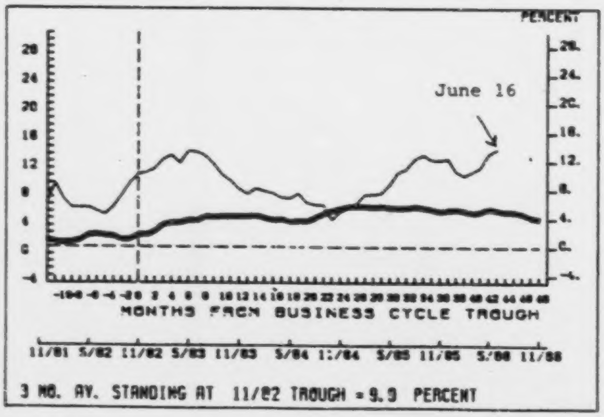
60. FEDERAL DEBT, G.R.



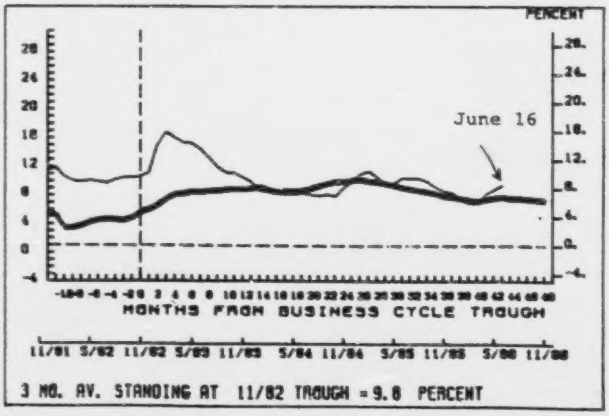
61. TOTAL DEBT, G.R.



62. MONEY SUPPLY (M1), G.R.

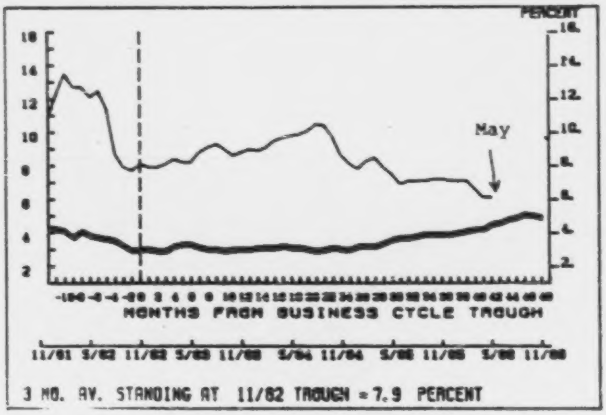


63. MONEY SUPPLY (M2), G.R.



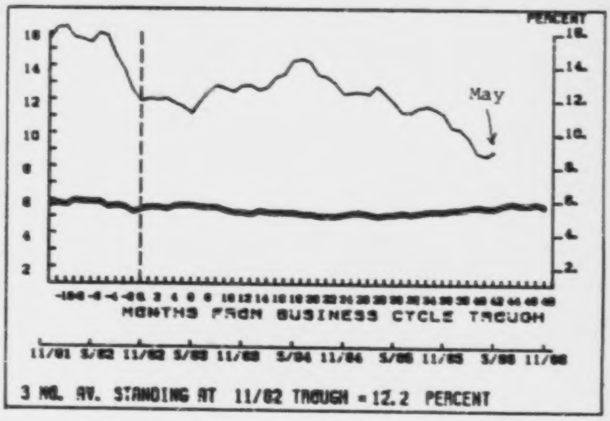
MONEY CREDIT, INTEREST RATES AND STOCK PRICES, cont.

64. TREASURY BILL RATE (3-MONTH)



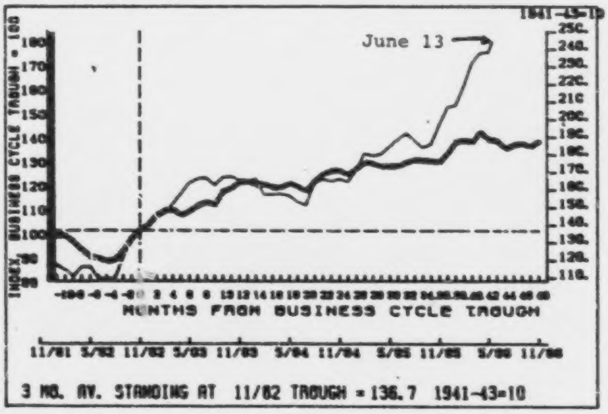
3 MO. AV. STANDING AT 11/82 TROUGH = 7.9 PERCENT

65. NEW CORPORATE BOND YIELD (AA)



3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

66. COMMON STOCK PRICE INDEX (S&P 500)



3 MO. AV. STANDING AT 11/82 TROUGH = 136.7 1941-43=10

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Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1986 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report Designed to Assist in the Evaluation of Current Business Conditions

Published by the **Center for International Business Cycle Research,**
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 8, No. 4
August 1986

Summary

The recovery has continued through its 45th month, and has now been exceeded by only two of the seven business cycle recoveries since 1948. Comparisons with the two longer ones show that the leading indexes are keeping up well with where they were when more expansion lay ahead. Total employment is tracking the two longer recoveries closely, but real GNP has been weaker. Much of this weakness stems from the trade deficit, and especially from how it is deflated in the GNP accounts. Using an alternative method the slowdown in real GNP in the first half of 1986 is virtually erased. A new leading index based upon the responses of purchasing managers to questions about prices, inventories, orders and deliveries gives a less optimistic reading on current prospects than other leading indexes, but nonetheless suggests faster growth ahead. The disinflation in commodity markets, according to a new daily index of industrial materials prices, has subsided.

A Very Long Recovery

The current recovery became 45 months old in August. Since it has evidently not expired, despite some signs that it may be getting tired, we shall henceforth make comparisons with the two longer ones. The longest lasted from February 1961 to November 1969, 106 months. The next longest ran from March 1975 to January 1980, 58 months. Our charts now extend to 60 months from the business cycle trough. If the recovery ends before its 60th month, which would be November 1987, we should be able to see signs of it before then, by comparing the current pattern with the average of the two long recoveries. The position of each of the two, at dates corresponding to the latest figure for the current recovery, is shown in Tables 1, 2, and 3.

Real GNP has not grown as rapidly as it did in the average of the two very long recoveries, largely as a result of the slowdown since mid-1984 (Charts 16,17). The various measures of employment, on the other hand, have done better than the average.

The percentage of the working-age population employed reached an all-time record high in August, 61.3%. The total unemployment rate has delined more in the current recovery than in the two earlier long ones, but remains at a substantially higher level, in sharp contrast to the insured unemployment rate. Another contrast is between the weaker than average performance of consumption and the stronger than average performance of retail sales, both adjusted for inflation.

These differences raise some questions about the quality of our economic measurements, and underline the importance of checking one source or type of measure against another. For example, the weakness in GNP and the strength of employment has produced unusual weakness in measures of productivity. This may be connected with the growth of the service industries compared with goods-producing industries (cf. Charts 26, 27), although we have no direct current measure of productivity in the service sector. We do know that the service industries contribute much less to real GNP than to employment, and that during the current recovery the services share in employment has been rising while its share in GNP has been falling. But whether this means that the output of services and hence total output is being understated, or that productivity in services is declining, is not known. Another reason for thinking that the growth of real output may be understated—is developed in the next section.

The Effect of the Trade Balance on Real GNP

The recent sharp reduction in the growth rate of real GNP from 3.8% in the first quarter to 0.6% in the second, was greatly affected by net exports. Excluding this component, the growth rate was 3.0% in the first quarter and 3.2% in the second. Much depends, then, on how the net exports component is measured in real terms.

Readers of Recession-Recovery Watch are familiar with our method of adjusting net exports (exports minus imports) for price changes. We deflate the current dollar deficit directly by dividing it by the implicit price deflator for gross domestic purchases (GNP excluding net exports). This method produces a growth rate in real GNP of 4.3% in the first quarter and 2.7% in the second (Table A). Whether there was a sharp or a mild slowdown in economic growth during the first half of 1986 depends, therefore, on whether the Commerce Department's method of measuring net exports in constant prices is accepted or our alternative is used.

This issue depends fundamentally of one's view about the reasonableness of including in real GNP the effect of a change in the terms of trade. When the United States gets higher prices for what it exports and pays lower prices for what it imports, is it better off or worse off in real terms, or doesn't it really matter? When Commerce calculates the international trade

TABLE A.

ALTERNATIVE MEASURES OF OUTPUT, NET EXPORTS AND PRICES

	Levels						Percent Changes, Annual Rate					
	I/85	II/85	III/85	IV/85	I/86	II/86	IV/84 -I/85	I/85 -II/85	II/85 -III/85	III/85 -IV/85	IV/85 -I/86	I/85 -II/86
In Current Dollars (billions)												
1. Total GNP	3909.3	3965.0	4030.5	4087.7	4149.2	4179.8	6.8	5.8	6.8	5.8	6.2	3.0
2. Net exports	-49.4	-77.1	-83.7	-105.3	-93.7	-100.2	-	-	-	-	-	-
3. Gross domestic purchases (1-2)	3958.7	4042.1	4114.2	4193.0	4242.9	4280.0	4.9	8.7	7.3	7.9	4.8	3.5
In 1982 Dollars												
4. Total GNP, official	3547.0	3567.6	3603.8	3622.3	3655.9	3661.5	3.1	2.3	4.1	2.1	3.8	0.6
5. Net exports, official	-78.8	-108.1	-113.8	-132.0	-125.9	-150.5	-	-	-	-	-	-
6. Gross domestic purchases (4-5)	3625.8	3675.7	3717.6	3754.3	3781.8	3812.0	1.4	5.6	4.6	4.0	3.0	3.2
7. Net exports, CIBCR (2÷10)	-45.2	-70.1	-75.6	-94.3	-83.5	-89.2	-	-	-	-	-	-
8. Total GNP,CIBCR (6+7)	3580.6	3605.6	3642.0	3660.0	3698.0	3722.8	3.3	2.8	4.1	2.0	4.3	2.7
Implicit Price Deflator (1982=100)												
9. Total GNP, official (1÷4)	110.21	111.14	111.84	112.85	113.49	114.16	3.6	3.4	2.5	3.7	2.3	2.4
10. Total GNP, CIBCR (3÷6)	109.18	109.97	110.67	111.69	112.19	112.28	3.4	2.9	2.6	3.7	1.8	0.3

component of real GNP, it deflates the nominal dollar value of exports by export prices and imports by import prices. As a result, any change in the relation between export and import prices since the base year (1982) gets washed out. By this method of calculation real GNP does not grow any faster when export prices go up and import prices go down, assuming no change in the quantity of exports and imports.

Nevertheless, a change in the relative prices of exports and imports, with no change in quantities, does produce a change in the magnitude of our claims against foreign countries, a type of capital formation similar to the change in inventories or plant and equipment. That is the reason for including net exports in GNP. Whether it originates from a change in relative prices or in quantities is immaterial, so long as it represents a change in the real value of our claims. This can be determined by deflating the nominal value of net exports by a measure of the general level of prices, which is the method we use.

The net export deficit in current dollars increased only slightly in the second quarter. Since the general level of prices, excluding net exports, has risen about 12% since 1980, but was virtually unchanged in the second quarter, our method shows that the real value of the net exports deficit was smaller in 1980 dollars than in current dollars, and increased only slightly in the second quarter. On the other hand, by the Commerce Department's method, the net export deficit in 1980 dollars was about 50% larger than the current dollar figure in the second quarter, and increased very sharply from the first quarter. This offset nearly all of the increase in the rest of GNP. It reflected the removal of the benefit to us of the sharp decline in import prices relative to export prices, due to the drop in oil prices. By our measure, this favorable shift in the terms of trade contributed $42.4 billion 1980 dollars to real GNP in the first quarter, and $61.3 billion in the second. As a result, real GNP rose at an annual rate of 2.7% in the second quarter.

If oil prices now stabilize or increase, and other import prices also advance as a result of the decline in the dollar exchange rate, we may have seen the end of this favorable shift in the terms of trade. At the same time, however, we may get a more favorable growth in the quantity of exports relative to imports. If, then, real gross domestic purchases continues to grow at the 3 to 4% rate it has achieved in the past four quarters, the long recovery will continue.

A Leading Index from the Purchasing Managers' Survey

One of the Center's recent studies has produced a leading index from the survey data issued by the National Association of Purchasing Management (NAPM)*. It is based on the four questions in the survey that pertain to leading variables: change in buying prices, change in inventories, vendor performance and new orders. The index bears a strikingly close resemblance to the BCD leading index, which is based on twelve indicators. Its turning points match everyone of the 16 business cycle peaks and troughs since 1948 and lead or coincide with most of them. The average lead is 2 months at troughs and 5 months at peaks. The leads are somewhat shorter than those of the BCD index, which average 3 and 10 months. respectively. Data for the new index

*Philip A Klein and Geoffrey H. Moore, Purchasing Management Survey Data: Their Value as Leading Indicators, CIBCR ms., July 1986.

are available about three weeks before those for the BCD index, which offsets part of the difference in lead-time. Also, the NAPM series are not subject to revision.

The recovery pattern of the NAPM index (Chart A) is similar to those of the other leading indexes but less optimistic during the past year or so. This may be because the purchasing managers are connected with manufacturing industries, which have not fared as well as the rest of the economy. Nevertheless, the index has been pointing towards faster growth ahead.

A New Daily Index of Industrial Materials Prices

In September the Journal of Commerce began publishing a new daily price index for industrial materials. The development work on the index was done by Geoffrey Joyce at the Center. The index includes 18 commodities selected because of their economic significance and record of anticipating major cyclical movements in inflation. The new index replaces the previous Journal of Commerce index of 15 commodities. It displaces three commodities (turpentine, linseed oil and silk) from the previous index and adds the price of crude oil, aluminum, plywood, red oak, benzene, and corrugated boxes. Hence it covers a broader and more up-to-date list of products than other indexes of this type. Three sub-indexes also are compiled, covering four textiles, six metals and eight miscellaneous commodities.

The new index is constructed by a method not hitherto used for price indexes. The weighting system takes account not only of the economic importance of each commodity but also how well its price performs as a leading indicator of inflation. Moreover, changes in each price are standardized to preclude dominance by any one series and to produce a smoother index. This is basically the method used by the Department of Commerce to construct its leading index of business cycles as well as by the Center in its several leading indexes.

The index and sub-indexes have been computed monthly back to 1948. The overall index has anticipated every major swing in inflation in consumer prices, with an average lead of nearly a year. Occasionally, however, the index has registered movements that are not reflected in the overall inflation rate. In 1984, for example, it displayed a much sharper rise and fall than the CPI rate did (Chart B).

The decline in the new index during 1986 has been deeper than in the 15 commodity index previously used, mainly because the new index includes the price of petroleum. This easing of inflationary pressures was also reflected in the CPI rate. During the past few months the index has leveled off, suggesting that the disflationary pressures in the commodity markets have subsided. This development is borne out by all three of the sub-indexes that are compiled daily, although the sharp drop in the U.S. price of cotton pushed the textile index down on August 1st.

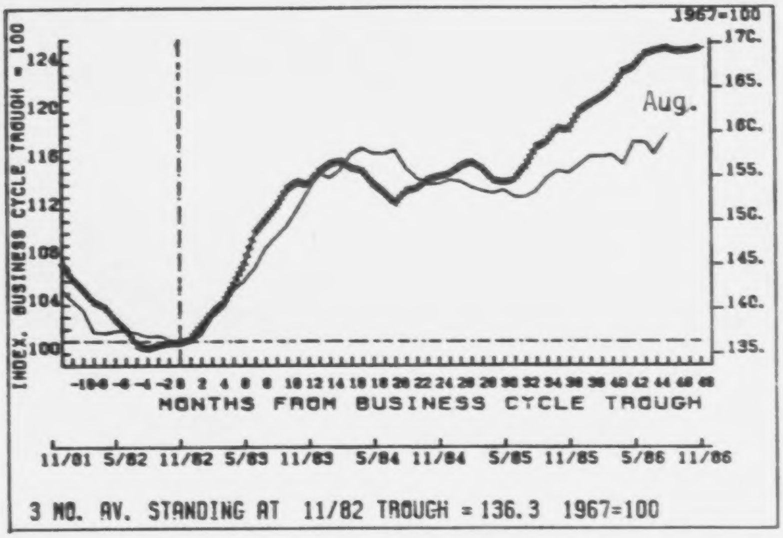
CHART A.

RECOVERY PATTERNS: NAPM LEADING INDEX

——— Current recovery to date (business cycle trough: November 1982)

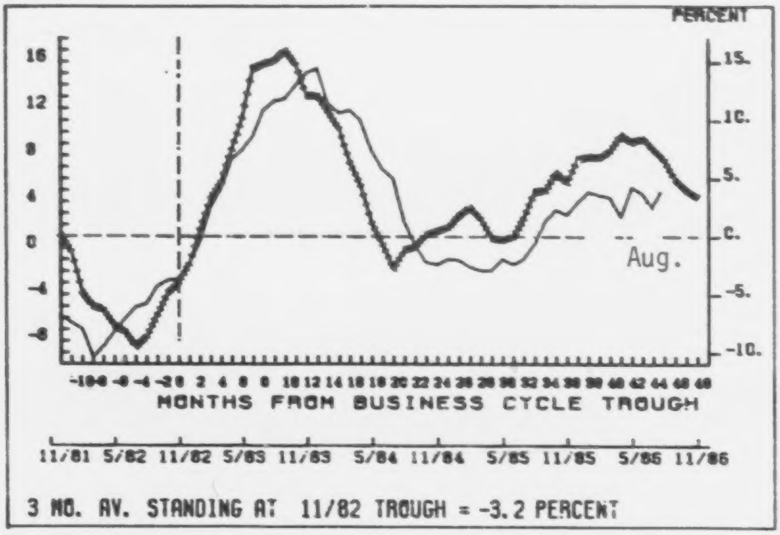
++++++++ Average of three long recoveries (1949-53, 1961-69, 1975-80)

NAPM INDEX



3 MO. AV. STANDING AT 11/82 TROUGH = 136.3 1967=100

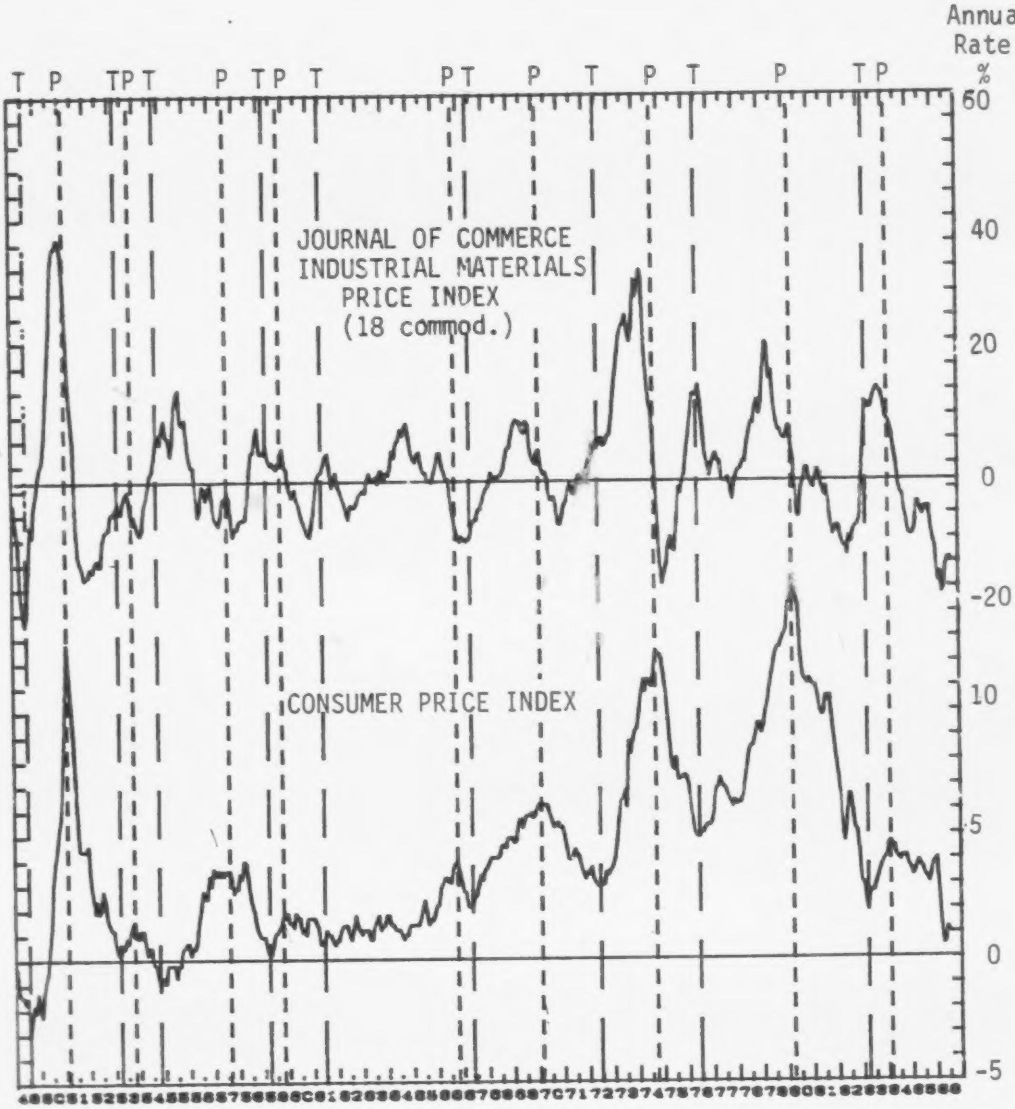
NAPM INDEX GROWTH RATE



3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

CHART B

GROWTH RATES IN MATERIALS PRICES AND CONSUMER PRICES



Note: Vertical lines are peaks (P) and troughs (T) in the CPI growth rate. Growth rates are six-month smoothed percent changes at annual rate.

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The series numbers of indicators that are reported in Business Conditions Diges are noted above. Readers may wish to consult the 1984 "Handbook of Cyclical Indicators" for further information on particular time series. The letter symbols "L," "C," "Lg," and "U" identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest.

L = leading C = coincident Lg = lagging
U = unclassified because of inconsistency in timing

The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively.

When the series we use is similar but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 45 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Actual Levels

		Unit	Months After Business Cycle Trough	Expansions OCT. 1949	Starting FEB. 1961	MAR. 1975	Average (1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	COMPOSITE INDEXES								
6.	Business Week Leading Index, Growth Rate	%	45	-1.3	5.7	3.5	4.6	13.5	Aug. 16
7.	Leading Employment Index, Growth Rate	%	44	4.0	4.6	4.5	4.5	1.4	July
8.	Coincident Employment Index, Growth Rate	%	44	5.9	5.8	9.6	7.7	4.2	July
9.	Leading Index, Growth Rate.	%	44	-2.2	8.0	3.5	5.7	6.0	July
10.	Coincident Index, Growth Rate	%	44	6.9	4.7	8.3	6.5	1.8	July
11.	Diffusion Index of Leading Indicators	% Rising	45	n.a.	74.0	83.0	77.0	56.0	July
13.	Ratio, Coincident to Lagging Index	1967=100	44	113.9	94.8	126.7	110.7	124.2	July
15.	Eight-Country Leading Index, Growth Rate	%	42	n.a.	3.2	8.0	5.6	1.7	May
II.	OUTPUT, INCOME AND SALES								
17.	Real GNP Growth Rate	%	14Q	5.7	4.8	5.8	5.3	2.2	Q2
III.	EMPLOYMENT AND UNEMPLOYMENT								
23.	Employment to Population Ratio	%	44	58.3	56.3	60.2	58.2	61.2	July
28.	Employment Diffusion Index, 186 Indus.	% Rising	44	70.0	78.7	75.5	77.1	46.5	July
29.	Unempl. Severity Index	Weeks per 100 in Labor Force	44	20.0	62.0	64.0	63.0	102.0	July
30.	Unemployment Rate: Total	%	44	2.5	4.9	5.8	5.3	6.8	July
31.	Unemployment Rate: Insured	%	44	2.4	3.4	3.0	3.2	2.8	July
33.	Short-Duration Unemployment Rate	%	44	2.1	3.7	4.5	4.1	4.9	July
34.	Layoff Rate Under 5 Weeks Times 10	%	44	2.8	4.0	4.4	4.2	4.5	July
35.	Part-time Employment Ratio	%	44	n.a.	3.1	3.8	3.4	2.6	July
IV.	INVESTMENT COMMITMENTS AND INVENTORIES								
42.	Inventory/Sales Ratio Times 10	%	43	15.4	14.3	15.5	14.9	15.6	June
43.	Change in Inventories on Hand & on Order	Bil. 82$.	43	10.9	32.3	37.4	34.8	-5.5	June
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS								
44.	Output per Hour, Growth Rate	%	14Q	2.6	4.0	0.6	2.3	1.5	Q2
45.	Unit Labor Costs, Growth Rate	%	14Q	3.1	1.3	7.7	4.5	1.4	Q2
46.	Hourly Compensation, Growth Rate	%	14Q	6.5	5.2	8.4	6.8	2.8	Q2
47.	Real Hourly Compensation, Growth Rate	%	14Q	5.1	4.3	-0.2	2.0	2.0	Q2
48.	Selling Price Index, Growth Rate	%	14Q	2.0	1.6	7.7	4.6	1.9	Q2
49.	Growth in Prices minus Growth in Costs	% Points	14Q	-1.1	0.3	0.0	0.2	0.5	Q2
50.	Corporate Profit Margin	%	13Q	10.1	12.6	8.7	10.6	8.5	Q1
51.	Price/Labor Cost Ratio	1977=100	14Q	98.8	100.8	99.6	100.2	99.1	Q2
55.	Consumer Price Index, Growth Rate	%	44	0.9	1.0	9.5	5.2	1.0	July
57.	Industrial Mat. Price Index, Growth Rate	%	45	-2.0	9.5	10.7	10.1	-13.1	August
58.	Import Prices, Growth Rate	%	43	-4.5	1.3	9.0	5.1	-15.0	Q2(June)
59.	Anticipated Selling Prices (D&B Survey)	% Rising	43	n.a.	57.0	89.0	73.0	63.0	Q2(June)
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES								
60.	Business & Consumer Debt, Growth Rate	%	43	16.8	11.8	15.2	13.5	5.3	June
61.	Federal Debt, Growth Rate	%	44	1.8	2.2	9.5	5.8	12.8	July

62.	Total Debt, Growth Rate	%	43	6.7	8.4	14.0	11.2	8.4	June
63.	Money Supply (M1), Growth Rate	%	44	2.2	5.1	7.7	6.4	14.4	July
64.	Money Supply (M2), Growth Rate	%	44	3.5	8.3	8.0	8.1	9.2	July
65.	Treasury Bill Rate (3-Month)	%	44	2.1	3.6	8.6	6.1	5.8	July
66.	New Corporate Bond Yield (AA)	%	44	3.8	4.5	9.3	6.9	9.1	July

TABLE 2

RECESSION-RECOVERY STATUS UP TO 45 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Percentage Change from Trough Levels

		Months After Business Cycle Trough	Expansions Starting			Average (1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available.
			OCT. 1949	FEB. 1961	MAR. 1975			
I.	COMPOSITE INDEXES							
1.	Business Week Leading Index (CIBCR)	45	20.5	26.2	28.6	27.4	36.5	August 16
2.	Leading Employment Index (CIBCR)	44	30.1	24.6	26.0	25.3	25.8	July
3.	Coincident Employment Index (CIBCR)	44	41.3	22.0	36.9	29.4	31.4	July
4.	Leading Index (BCD)	44	14.3	29.5	35.7	32.6	28.5	July
5.	Coincident Index (BCD)	44	38.5	22.5	30.6	26.5	23.5	July
12.	Lagging Index (BCD)	44	44.8	13.4	-0.4	6.5	11.5	July
14.	Eight-Country Leading Index (CIBCR)	42	n.a.	12.0	21.9	16.9	20.5	May
II.	OUTPUT, INCOME AND SALES							
16.	Real GNP	14Q	31.0	18.8	18.9	18.8	15.9	Q2
18.	Industrial Production Index	44	45.0	29.6	32.8	31.2	23.4	July
19.	Real Personal Income	43	24.7	17.6	17.6	17.6	13.9	June
20.	Real Consumer Expenditures	43	15.1	17.2	17.9	17.6	16.7	June
21.	Real Retail Sales	43	12.6	19.4	21.5	20.4	22.8	June
III.	EMPLOYMENT AND UNEMPLOYMENT							
22.	Total Employment	44	8.5	5.9	14.1	10.0	10.7	July
24.	Nonfarm Employment	44	16.6	9.7	15.3	12.5	13.0	July
25.	Nonfarm Employee-Hours	44	17.5	10.1	15.4	12.8	13.1	July
26.	Employment in Goods-Producing Industries.	44	24.2	7.0	15.9	11.4	8.2	July
27.	Employment in Service-Producing Industries	44	11.6	11.4	15.1	13.2	14.5	July
32.	Initial Claims, Unemployment Insurance	44	-44.3	-37.8	-35.8	-36.8	-37.6	July
36.	Average Workweek, Manufacturing	44	3.7	3.3	4.2	3.7	4.2	July
37.	Overtime Hours, Manufacturing	44	n.a.	47.6	54.2	50.9	47.8	July
IV.	INVESTMENT COMMITMENTS AND INVENTORIES							
38.	New Private Housing Starts	44	-18.0	22.9	116.5	69.7	41.7	July
39.	New Private Housing Permits	44	-24.9	21.4	119.1	70.3	39.3	July
40.	Contract & Orders, Plant & Equipment	44	18.4	39.2	54.8	47.0	43.0	July
41.	New Capital Appropriations, Manufacturing	13Q	n.a.	85.9	5.5	45.7	13.2	Q1
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS							
52.	Large Business Failures	44	30.0	-3.3	-13.5	-8.4	3.1	July
53.	Leading Index of Inflation (CIBCR)	43	17.0	6.5	20.2	13.3	3.8	June
54.	Consumer Price Index, All Urban Consumers	44	12.9	4.3	27.9	16.1	11.6	July
56.	Industrial Materials Price Index	45	7.2	7.3	20.3	13.8	-6.8	August
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES							
67.	Stock Price Index (S&P 500)	44	51.3	36.8	14.3	25.6	75.6	July

TABLE 3

RECESSION-RECOVERY STATUS UP TO 45 MONTHS AFTER THE BUSINESS CYCLE TROUGH

Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions Starting OCT. 1949	FEB. 1961	MAR. 1975	Average (1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	COMPOSITE INDEXES								
6.	Business Week Leading Index, Growth Rate	%	45	-5.8	-0.9	8.8	4.0	8.8	August
7.	Leading Employment Index, Growth Rate	%	44	5.3	6.8	14.3	10.6	3.6	July
8.	Coincident Employment Index, Growth Rate	%	44	19.8	13.9	26.3	20.1	12.0	July
9.	Leading Index, Growth Rate.	%	44	-12.1	6.7	17.0	11.8	1.3	July
10.	Coincident Index, Growth Rate	%	44	14.1	11.4	23.4	17.4	8.6	July
11.	Diffusion Index of Leading Indicators	% Rising	44	n.a.	46.0	59.0	52.5	10.0	July
13.	Ratio, Coincident to Lagging Index	1967=100	44	-5.2	7.0	30.0	18.5	12.0	July
15.	Eight-Country Leading Index, Growth Rate	%	42	n.a.	-1.7	18.8	8.5	1.1	May
II.	OUTPUT, INCOME AND SALES								
17.	Real GNP Growth Rate	%	14Q	7.3	4.2	10.8	7.5	3.3	Q2
III.	EMPLOYMENT AND UNEMPLOYMENT								
23.	Employment to Population Ratio	%	44	2.8	0.0	3.7	1.9	3.5	July
28.	Employment Diffusion Index, 186 Indus.	% Rising	44	41.1	58.4	61.4	59.9	25.5	July
29.	Unempl. Severity Index	Weeks per 100 in Labor Force	44	-57.7	-29.3	-37.3	-33.3	-81.7	July
30.	Unemployment Rate: Total	%	44	-4.3	-1.7	-2.5	-2.1	-3.7	July
31.	Unemployment Rate: Insured	%	44	-5.0	-2.9	-3.3	-3.1	-2.2	July
33.	Short-Duration Unemployment Rate	%	44	-3.1	-1.0	-1.5	-1.2	-1.6	July
34.	Layoff Rate Under 5 Weeks Times 10	%	44	-3.5	-2.4	-4.1	-3.3	-4.5	July
35.	Part-time Employment Ratio	%	44	n.a.	1.3	1.0	1.2	0.7	July
IV.	INVESTMENT COMMITMENTS AND INVENTORIES								
42.	Inventory/Sales Ratio Times 10	%	43	0.2	-1.2	-1.8	-1.5	-1.5	June
43.	Change in Inventories on Hand & on Order	Bil. 82$.	43	8.3	57.3	96.6	77.0	33.7	June
V.	PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS								
44.	Output per Hour, Growth Rate	%	14Q	2.6	2.2	1.1	1.6	0.4	Q2
45.	Unit Labor Costs, Growth Rate	%	14Q	1.8	0.0	-3.7	-1.8	-3.9	Q2
46.	Hourly Compensation, Growth Rate	%	14Q	4.9	2.0	-2.7	-0.3	-3.7	Q2
47.	Real Hourly Compensation, Growth Rate	%	14Q	2.3	2.5	-0.4	1.0	-0.2	Q2
48.	Selling Price Index, Growth Rate	%	14Q	2.0	1.9	-5.5	-1.8	-2.4	Q2
49.	Growth in Prices minus Growth in Costs	% Points	14Q	0.2	1.9	-1.8	0.0	1.5	Q2
50.	Corporate Profit Margin	%	13Q	-3.0	3.4	3.0	3.2	4.6	Q1
51.	Price/Labor Cost Ratio	1977=100	14Q	0.1	4.2	2.4	3.3	3.7	Q2
55.	Consumer Price Index, Growth Rate	%	44	2.6	-0.5	-0.2	-0.4	-3.1	July
57.	Industrial Mat. Price Index, Growth Rate	%	45	4.4	14.2	23.7	19.0	-6.1	August
58.	Import Prices, Growth Rate	%	43	0.8	3.1	-2.8	0.1	-13.2	Q2(June)
59.	Anticipated Selling Prices (D&B Survey)	% Rising	43	n.a.	2.0	13.3	7.7	-4.7	Q2(June)
VI.	MONEY, CREDIT, INTEREST RATES AND STOCK PRICES								
60.	Business & Consumer Debt, Growth Rate	%	43	13.5	4.2	9.2	6.7	5.5	June
61.	Federal Debt, Growth Rate	%	44	0.4	2.7	-1.8	0.5	-6.9	July

62.	Total Debt, Growth Rate	%	43	4.8	4.6	6.8	5.7	3.5	June
63.	Money Supply (M1), Growth Rate	%	44	2.9	3.5	4.0	3.8	4.5	July
64.	Money Supply (M2), Growth Rate	%	44	3.8	1.8	0.5	1.2	-0.6	July
65.	Treasury Bill Rate (3-Month)	%	44	1.0	1.2	3.1	2.2	-2.1	July
66.	New Corporate Bond Yield (AA)	%	44	1.3	0.0	-0.1	0.0	-3.1	July

RECESSION-RECOVERY PATTERNS

————	Current recovery to date (business cycle trough: November 1982 or IV Q 1982)
-+++++++++++-	Average of two very long recoveries (1961-69, 1975-80)

How to Read the Charts

The charts show how the current recovery, dated from November 1982, compares with the average previous recovery over the same length of time. They also show how the average previous recovery developed beyond the present point, and hence what a forecast based on that average would look like. Forecasts based upon other information can be evaluated against this background. One can see easily where new figures or forecasts would be placed.

The horizontal time scale in each chart shows the number of months before (-) or after (+) the business cycle trough (0). For the current cycle November 1982 is zero, May 1983 is Month 6, etc. The vertical scale on the left side of most charts is an index with the three-month average centered on the business cycle trough date equal to 100. This three-month average is called the trough standing. For the current cycle, the figures plotted are indexes with the October to December 1982 average equal to 100. Each of the previous cycles are converted to indexes in the same way, and then the corresponding months are averaged for the two very long cycles, 1961-80. Quarterly series (e.g., GNP) are treated in the same way as monthly except that quarterly business cycle trough dates are used and each quarter is plotted as a horizontal line for three months.

When the figures are percentages, ratios or changes (e.g., the unemployment rate or GNP growth rate, employment to population ratio, or change in inventories), the charts show actual levels of the data, rather than deviations from trough standings.

On all charts the right-hand scale applies to the current cycle. This scale shows how the averages for previous recoveries translate to current levels. The November 1982 trough standing for the current cycle is shown at the bottom of the chart for reference.

The averages, which extend out to four years after the trough, include the 1961-69 and 1975-80 recoveries, which lasted 106 and 58 months, respectively. The 1949-53, 1954-57, 1958-60, 1970-73 and 1980-81 recoveries, which lasted 45, 39, 24, 36 and 12 months respectively, are excluded to avoid including the subsequent recessions in the averages.

All the growth rates shown are six-month smoothed rates (or two-quarter smoothed), obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

Data in some charts are a month or a quarter more up-to-date than in the preceding three tables.

In the charts, growth rate is abbreviated to "G.R."

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover sixty-three indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, two very long expansions since 1961, and the average of the two very long expansions. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded from the averages covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, November 1985, which is 36 months after the November 1982 business cycle trough, all the entries for that indicator will be for 36 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

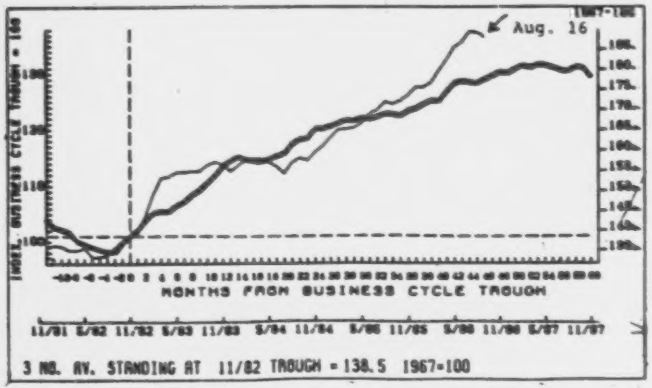
The tables pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending five years after the trough. The average recovery is also shown for each month of the six-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

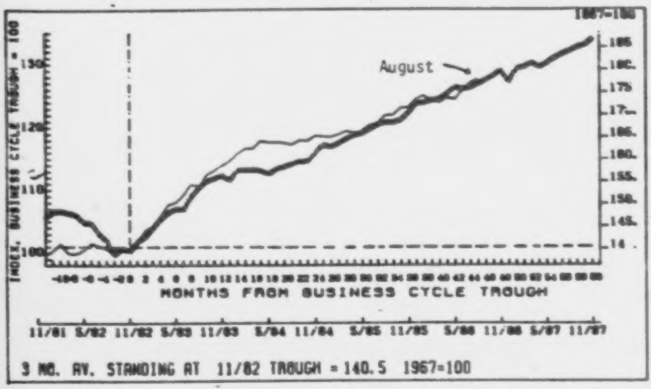
To order the 100-page 1986 Supplement, send in the order form on the back cover.

COMPOSITE INDEXES

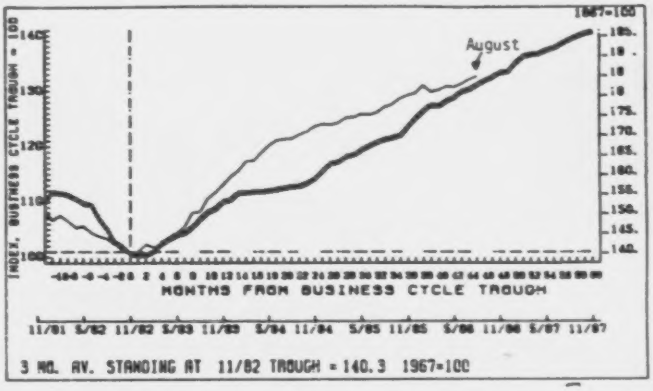
1. BUSINESS WEEK LEADING INDEX (CIBCR)



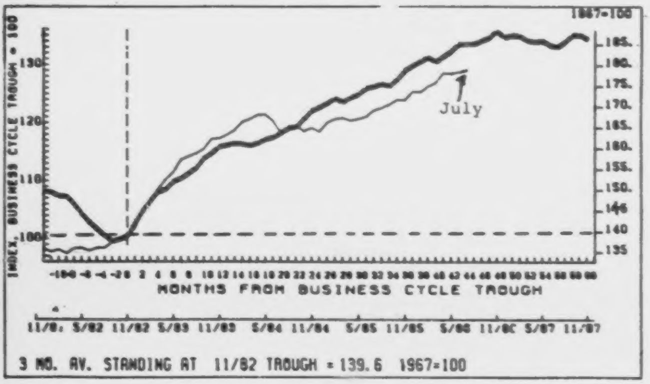
2. LEADING EMPLOYMENT INDEX (CIBCR)



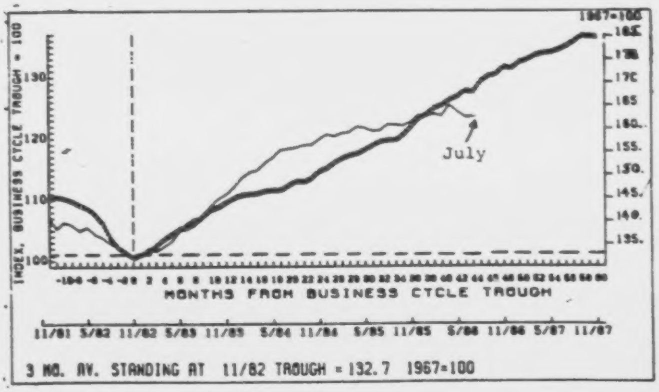
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)



4. LEADING INDEX (BCD)

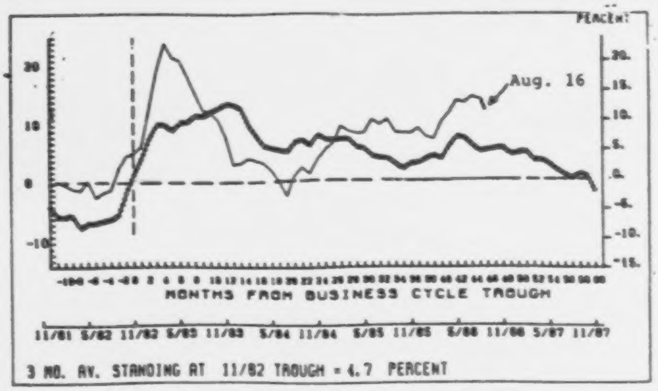


5. COINCIDENT INDEX (BCD)

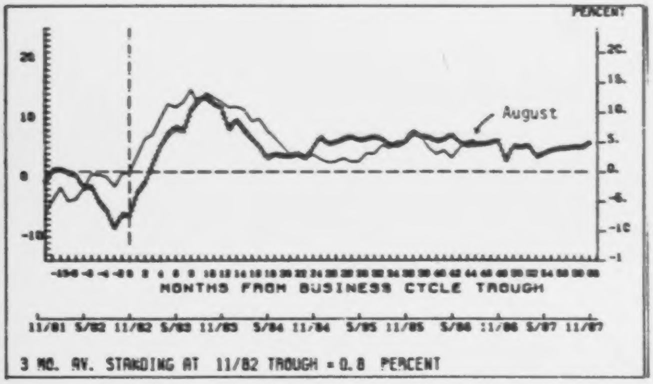


COMPOSITE INDEX GROWTH RATES

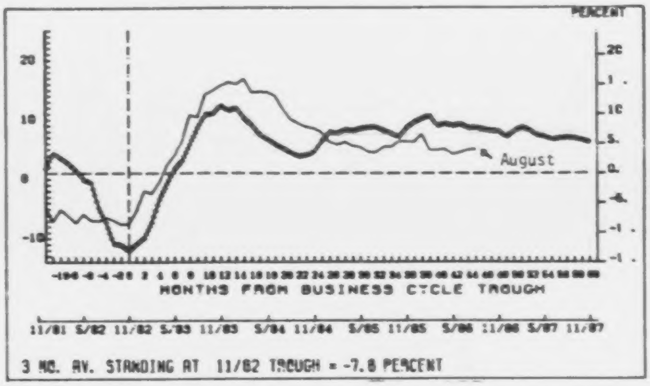
6. BUSINESS WEEK LEADING INDEX, G. R.



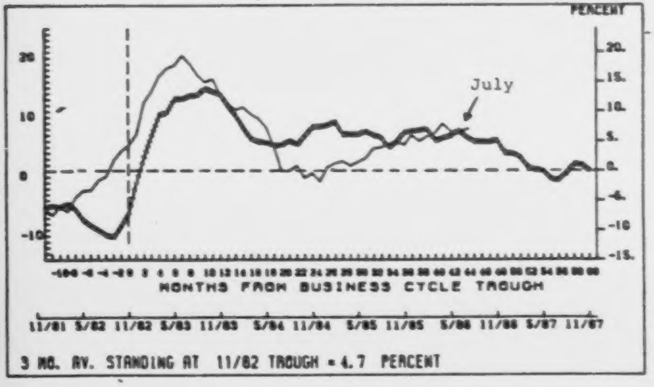
7. LEADING EMPLOYMENT INDEX, G. R.



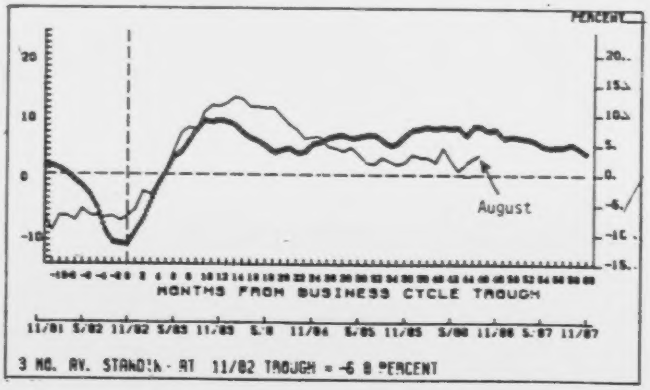
8. COINCIDENT EMPLOYMENT INDEX, G. R.



9. LEADING INDEX, G. R. (BCD)

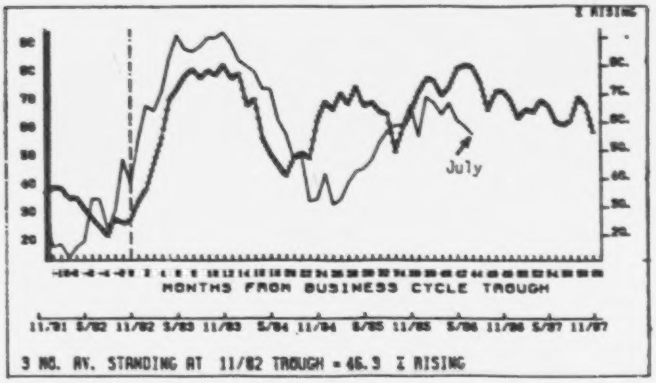


10. COINCIDENT INDEX, G. R. (BCD)



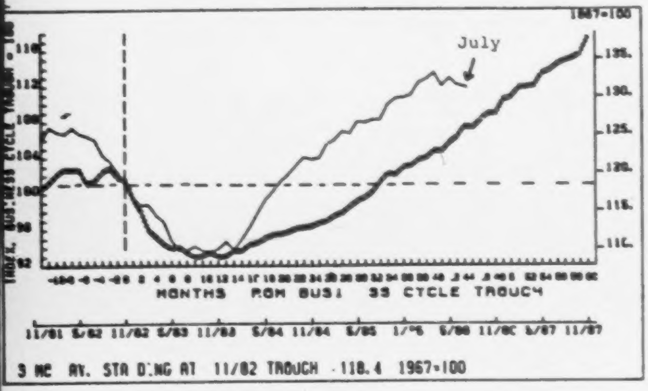
OTHER COMPOSITE INDEXES

11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



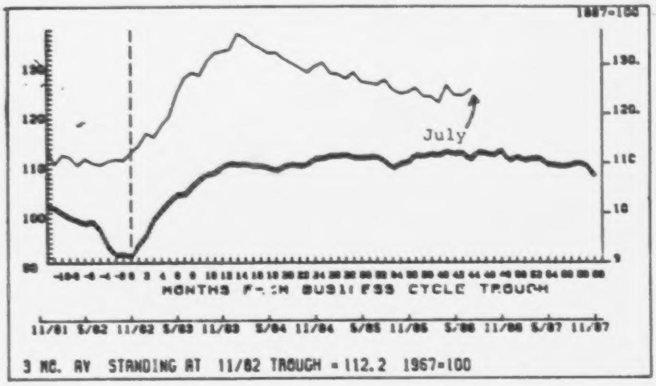
3 MO. AV. STANDING AT 11/82 TROUGH = 46.3 % RISING

12. LAGGING INDEX (BCD)



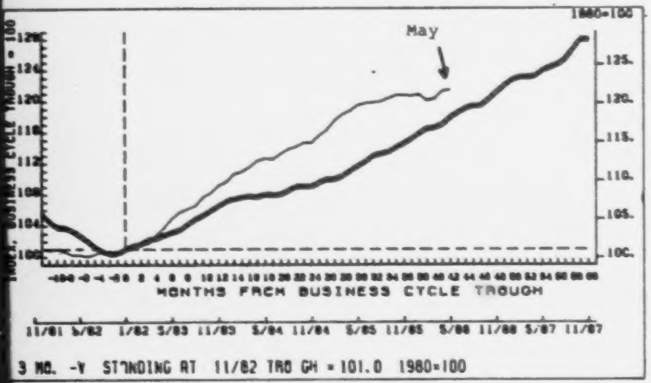
3 MO. AV. STANDING AT 11/82 TROUGH = 118.4 1967=100

13. RATIO, COINC. TO LAGGING INDEX



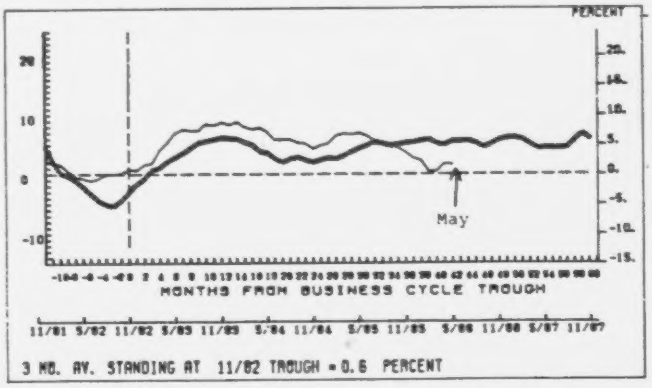
3 MO. AV STANDING AT 11/82 TROUGH = 112.2 1967=100

14. 8-COUNTRY LEADING INDEX (CIBCR)*



3 MO. AV. STANDING AT 11/82 TROUGH = 101.0 1980=100

15. EIGHT-COUNTRY LEADING INDEX, G. R.

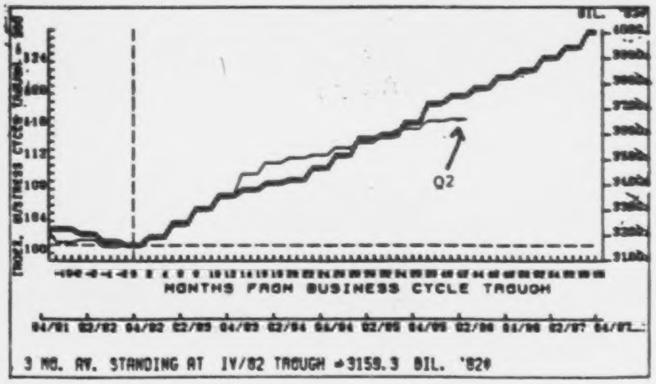


3 MO. AV. STANDING AT 11/82 TROUGH = 0.6 PERCENT

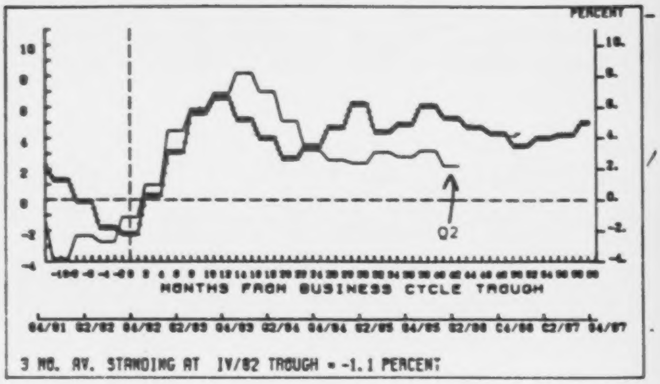
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

OUTPUT, INCOME AND SALES

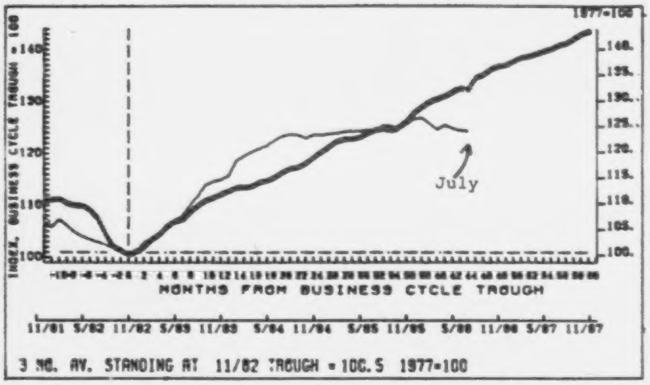
16. REAL GNP



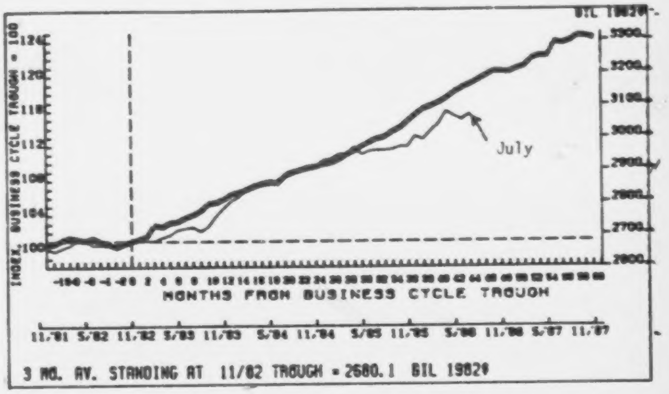
17. REAL GNP, GROWTH RATE



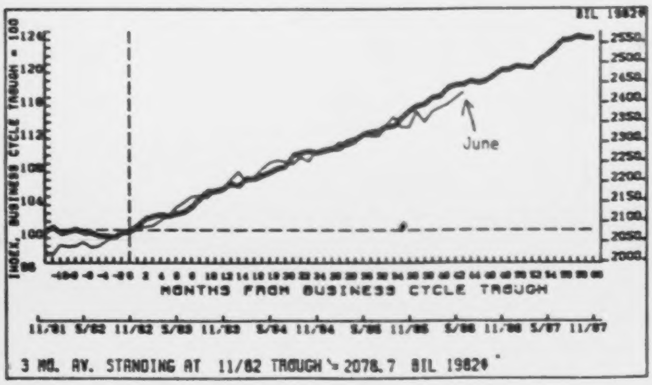
18. INDUSTRIAL PRODUCTION INDEX



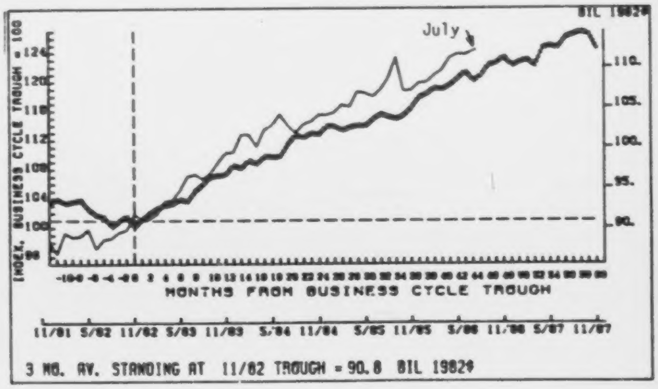
19. REAL PERSONAL INCOME



20. REAL CONSUMER EXPENDITURES

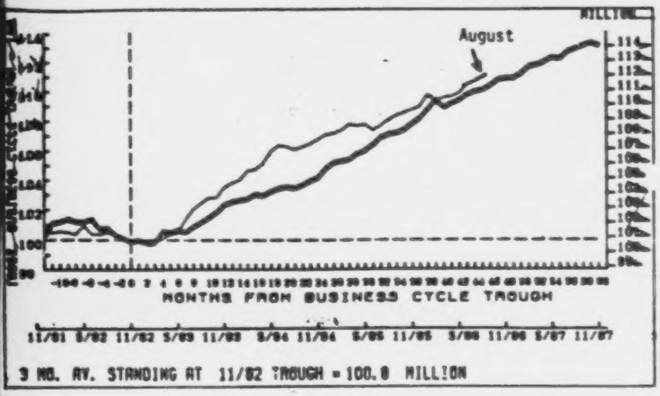


21. REAL RETAIL SALES



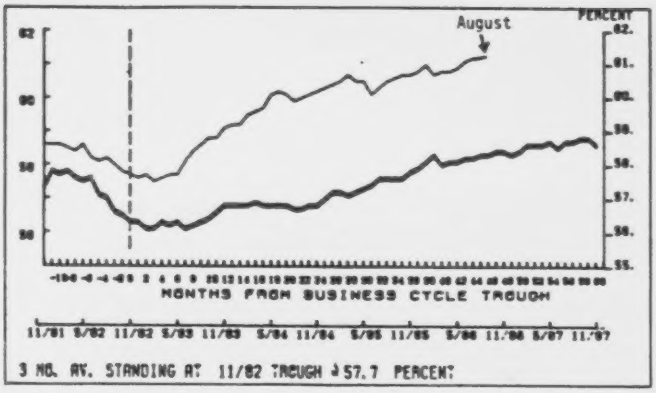
EMPLOYMENT

22. TOTAL EMPLOYMENT



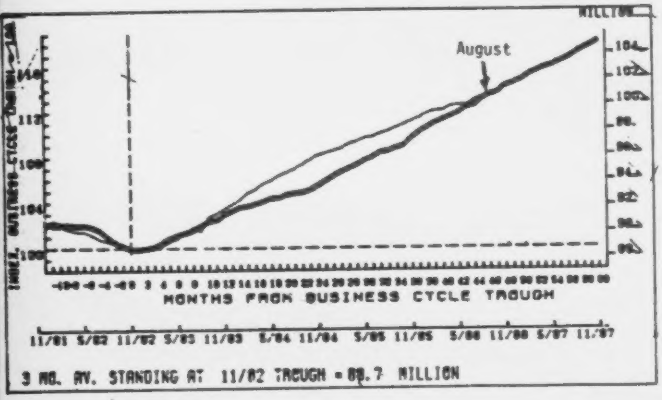
3 MO. AV. STANDING AT 11/82 TROUGH = 100.0 MILLION

23. EMPLOYMENT TO POPULATION RATIO



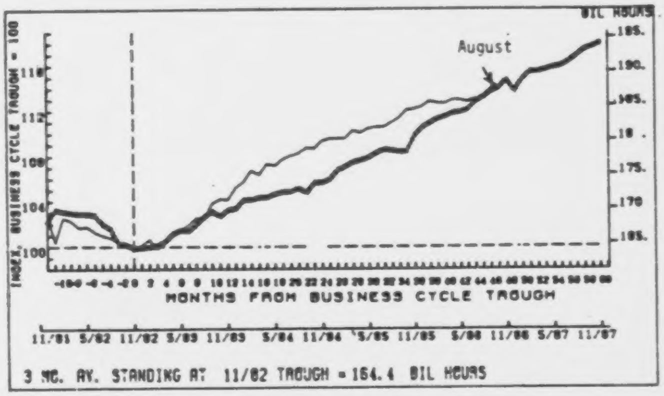
3 MO. AV. STANDING AT 11/82 TROUGH = 57.7 PERCENT

24. NONFARM EMPLOYMENT



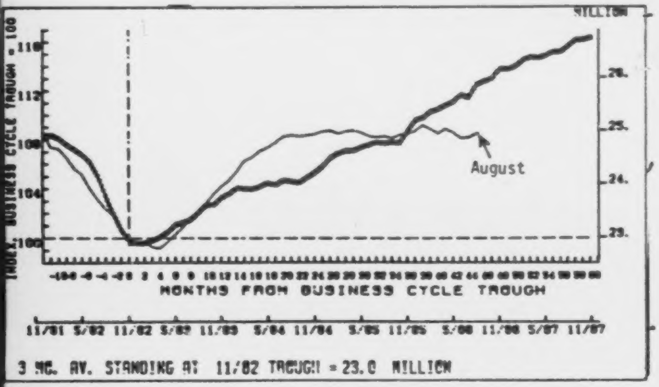
3 MO. AV. STANDING AT 11/82 TROUGH = 88.7 MILLION

25. NONFARM EMPLOYEE HOURS



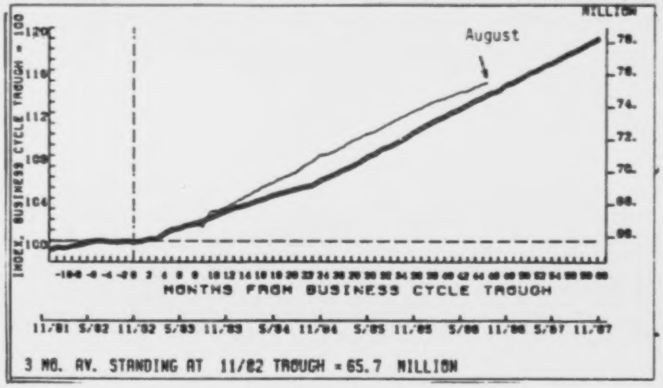
3 MO. AV. STANDING AT 11/82 TROUGH = 164.4 BIL HOURS

26. EMPLOYMENT IN GOODS-PROD. INDUS.



3 MO. AV. STANDING AT 11/82 TROUGH = 23.0 MILLION

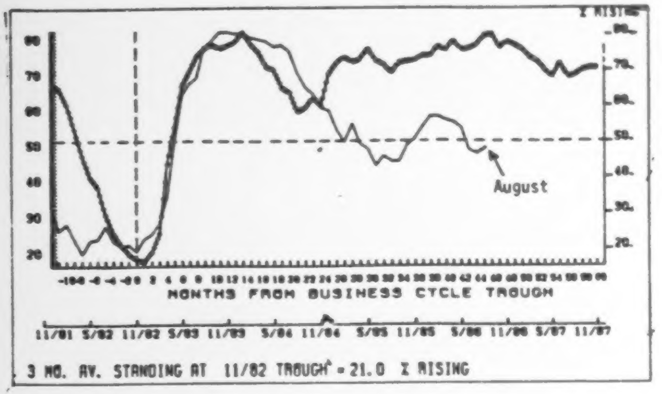
27. EMPLOYMENT IN SERVICE-PROD. INDUS.



3 MO. AV. STANDING AT 11/82 TROUGH = 65.7 MILLION

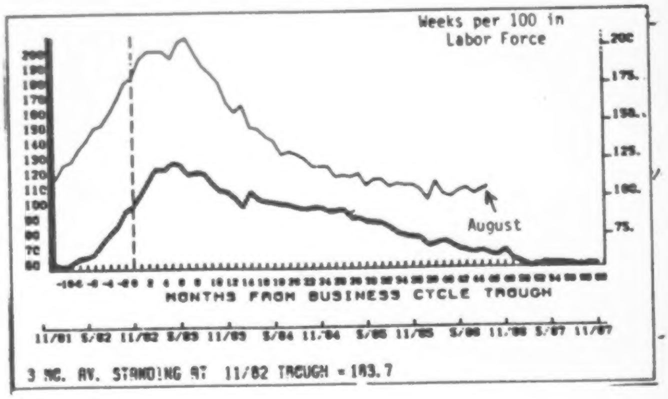
UNEMPLOYMENT

28. EMPLOY. DIFFUS. INDEX, 186 INDUS.



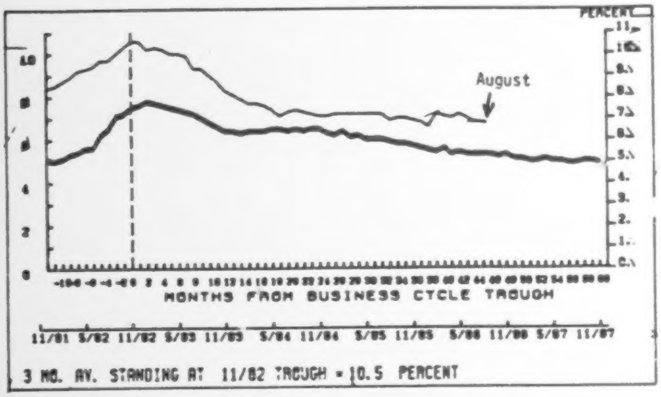
3 MO. AV. STANDING AT 11/82 TROUGH = 21.0 % RISING

29. UNEMPLOYMENT SEVERITY INDEX



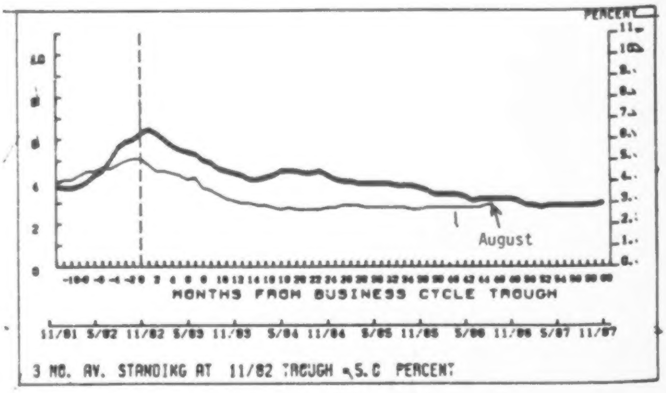
3 MO. AV. STANDING AT 11/82 TROUGH = 183.7

30. UNEMPLOYMENT RATE: TOTAL



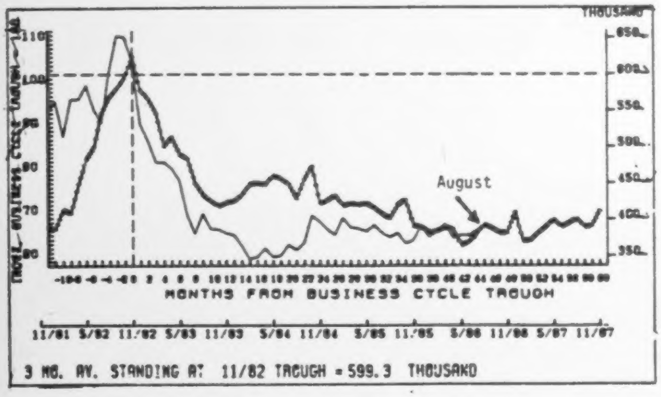
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

31. UNEMPLOYMENT RATE: INSURED



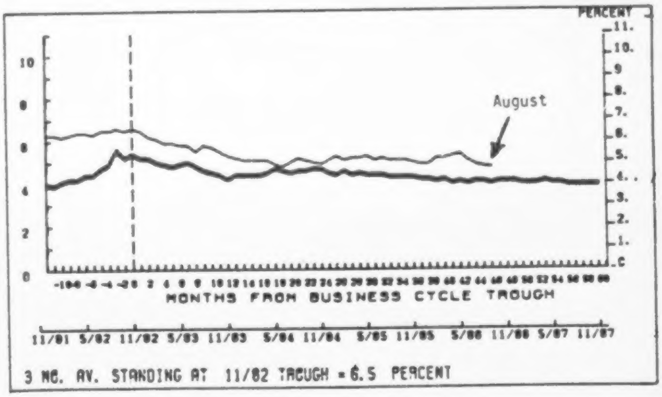
3 MO. AV. STANDING AT 11/82 TROUGH = 5.0 PERCENT

32. INITIAL CLAIMS, UNEMPLOY. INSUR.



3 MO. AV. STANDING AT 11/82 TROUGH = 599.3 THOUSAND

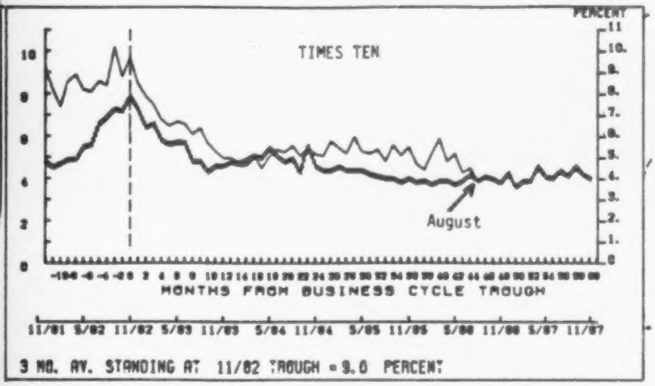
33. SHORT-DUR. UNEMPLOYMENT RATE



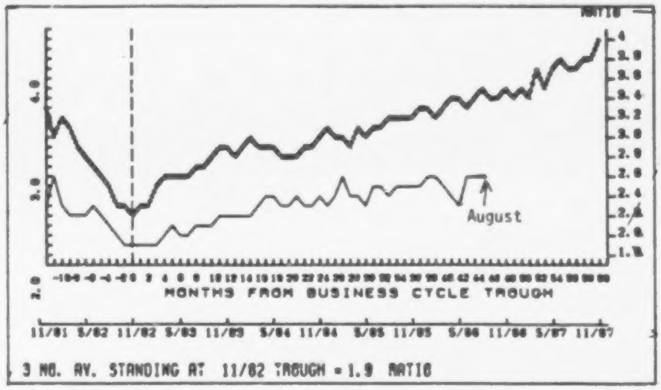
3 MO. AV. STANDING AT 11/82 TROUGH = 6.5 PERCENT

OTHER LEADING EMPLOYMENT INDICATORS

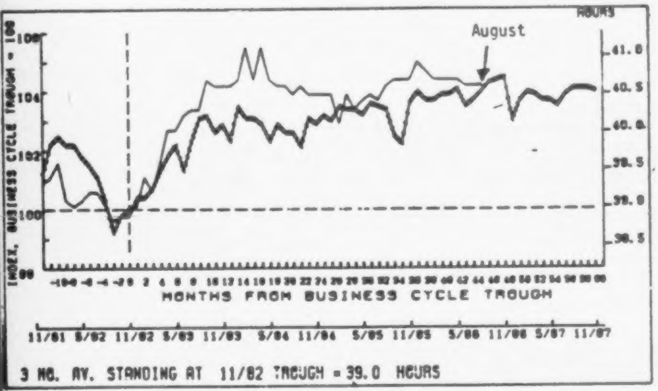
34. LAYOFF RATE UNDER 5 WEEKS



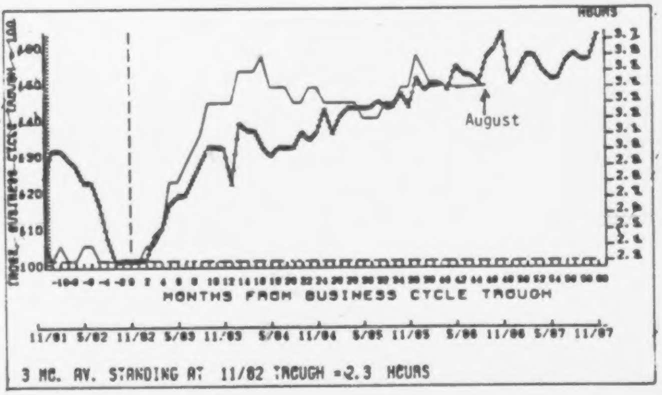
35. VOL. TO INVOL. PART-TIME EMPL. RATIO



36. AVERAGE WORKWEEK, MFG.

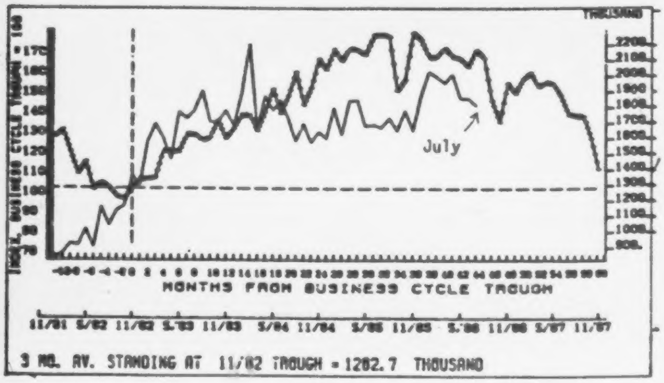


37. OVERTIME HOURS, MFG.



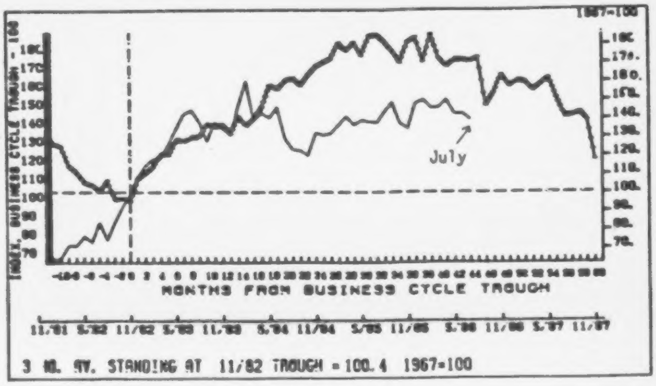
INVESTMENT COMMITMENTS AND INVENTORIES

38. NEW PRIVATE HOUSING STARTS



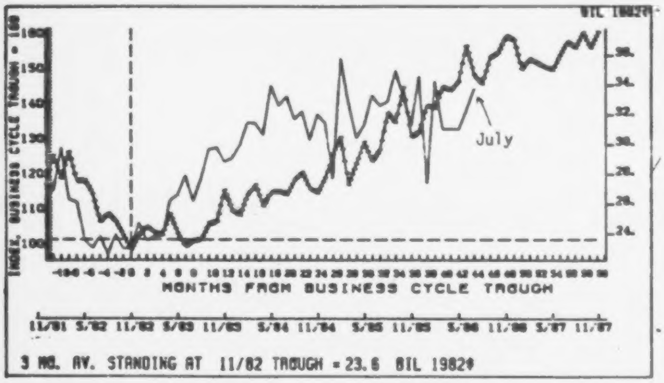
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

39. NEW PRIVATE HOUSING PERMITS



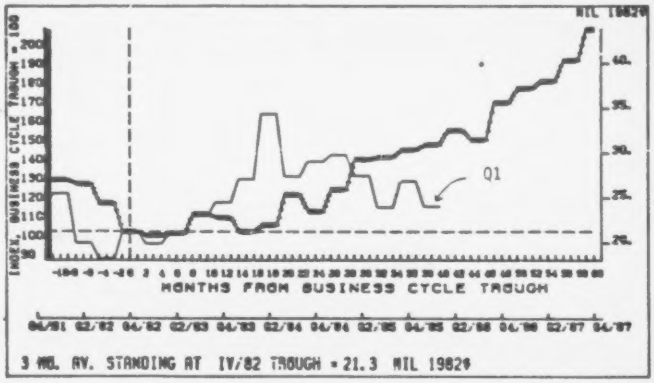
3 MO. AV. STANDING AT 11/82 TROUGH = 100.4 1967=100

40. CONTRACTS & ORDERS, PLANT & EQUIP.



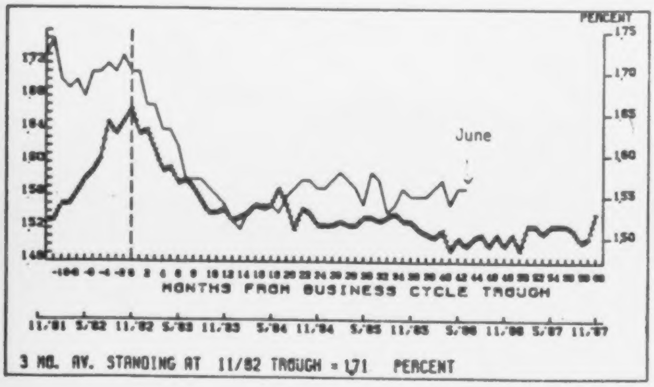
3 MO. AV. STANDING AT 11/82 TROUGH = 23.6 BIL 1982$

41. NEW CAPITAL APPROPRIATIONS, MFG.



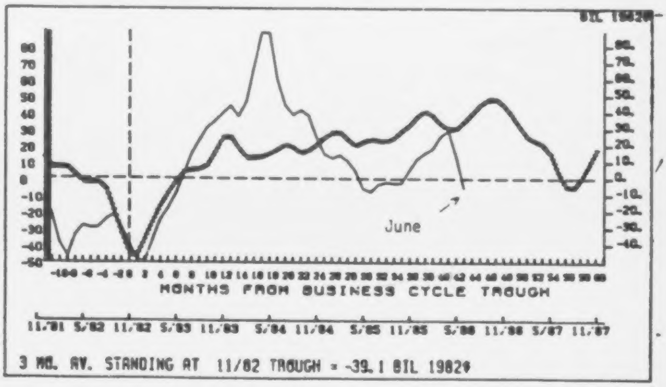
3 MO. AV. STANDING AT IV/82 TROUGH = 21.3 BIL 1982$

42. INV./SALES RATIO, MFG. AND TRADE



3 MO. AV. STANDING AT 11/82 TROUGH = 1.71 PERCENT

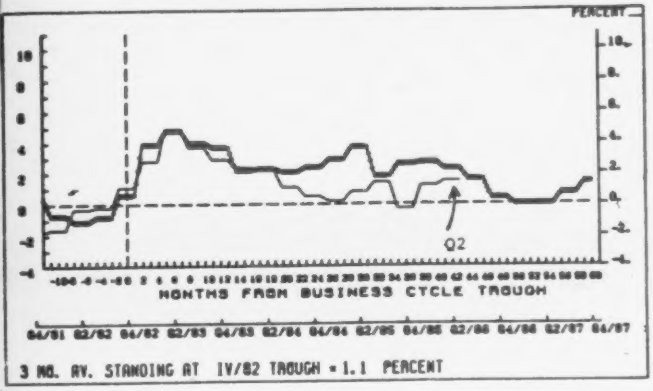
43. CHANGE IN INV. ON HAND & ON ORDER



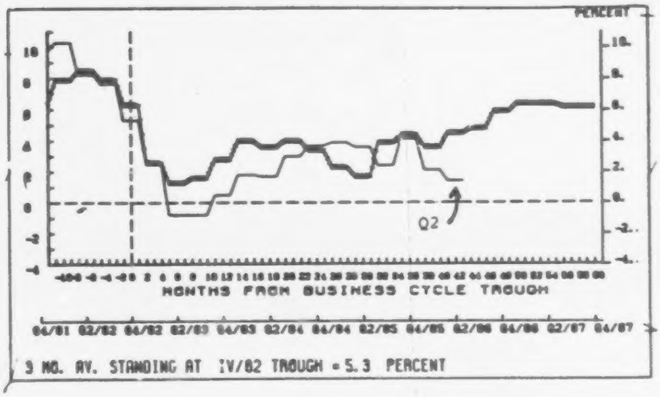
3 MO. AV. STANDING AT 11/82 TROUGH = -39.1 BIL 1982$

PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

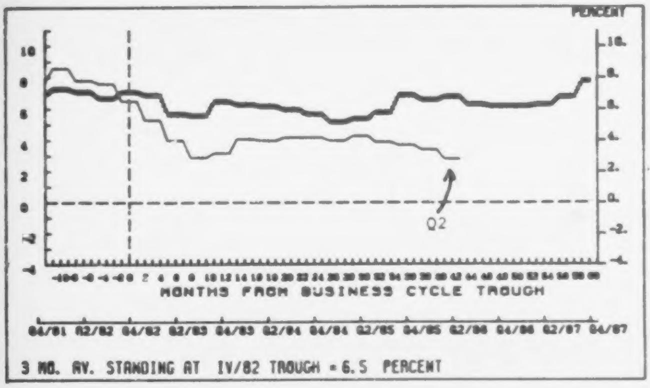
44. OUTPUT PER HOUR, G. R.



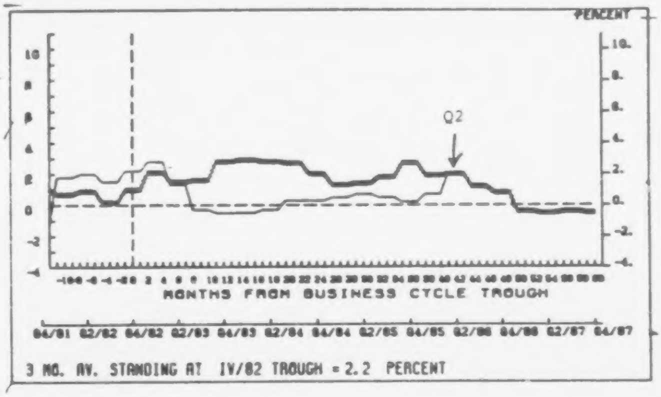
45. UNIT LABOR COSTS, G. R.



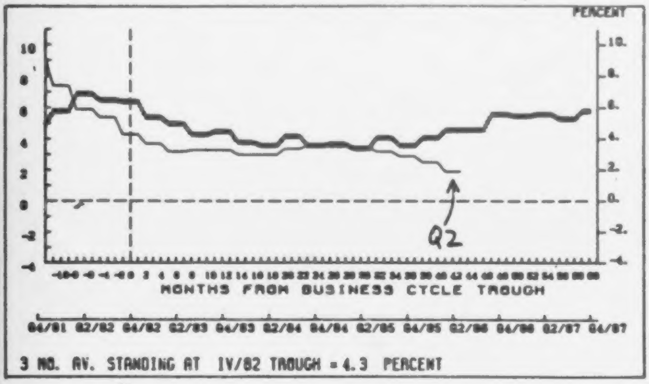
46. HOURLY COMPENSATION, G. R.



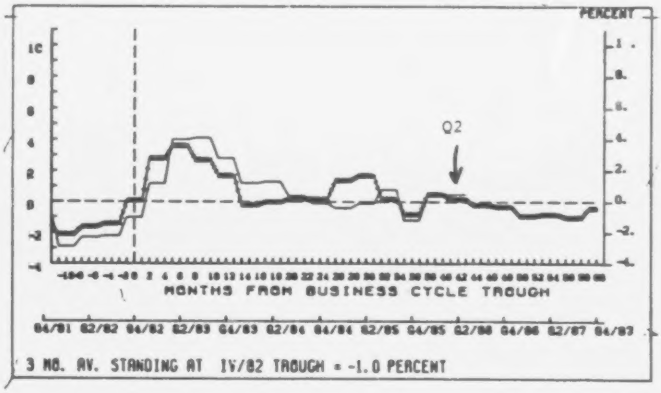
47. REAL HOURLY COMPENSATION, G. R.



48. SELLING PRICE INDEX, G. R.

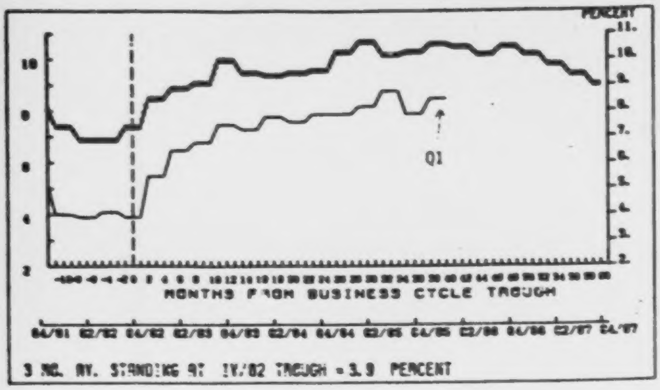


49. G. R. IN PRICES MINUS G. R. IN COSTS

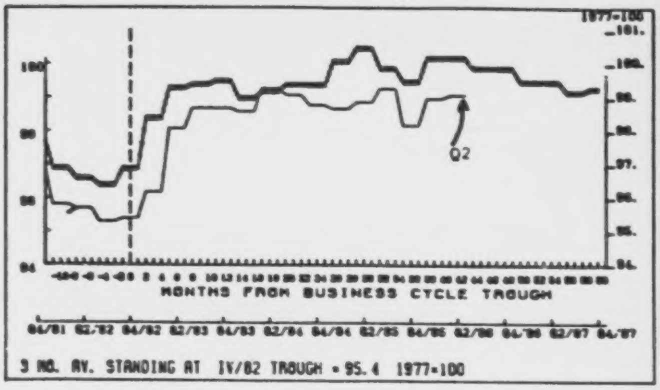


PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

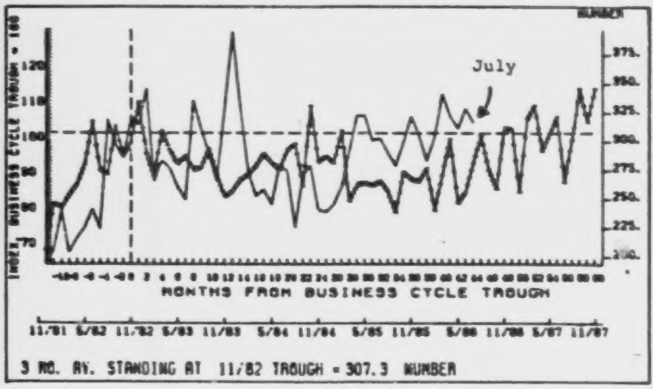
50. CORPORATE PROFIT MARGIN



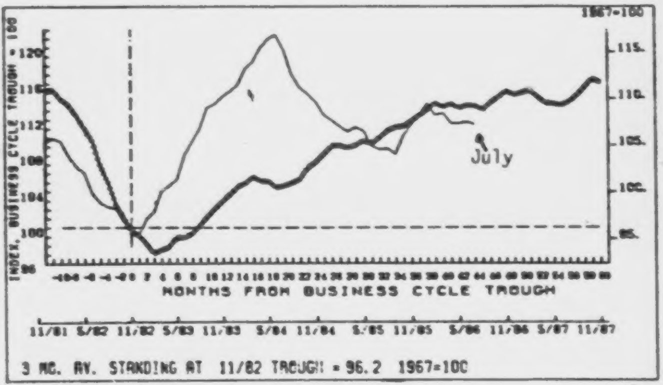
51. PRICE/LABOR COST RATIO



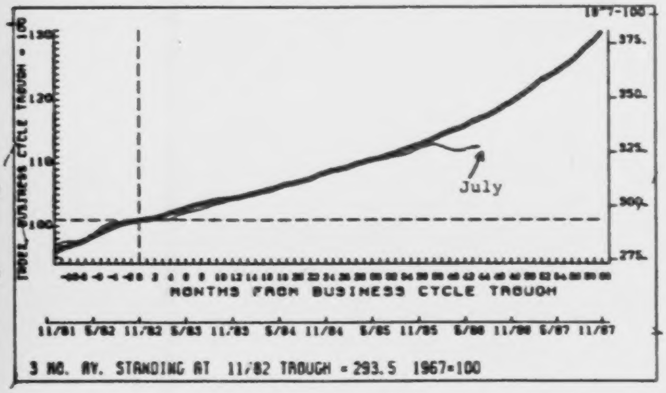
52. LARGE BUSINESS FAILURES



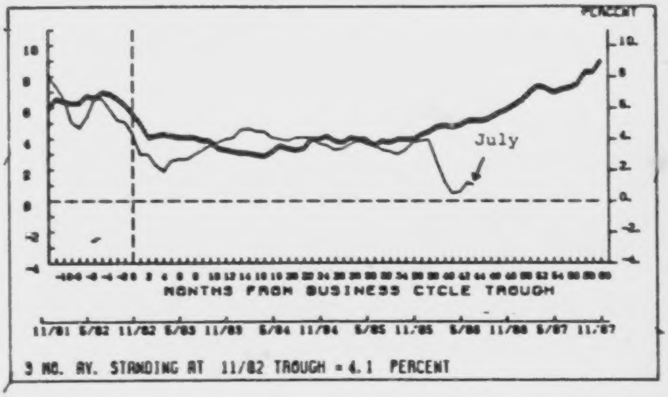
53. LEADING INDEX OF INFLATION (CIBCR)



54. CONSUMER PRICE INDEX

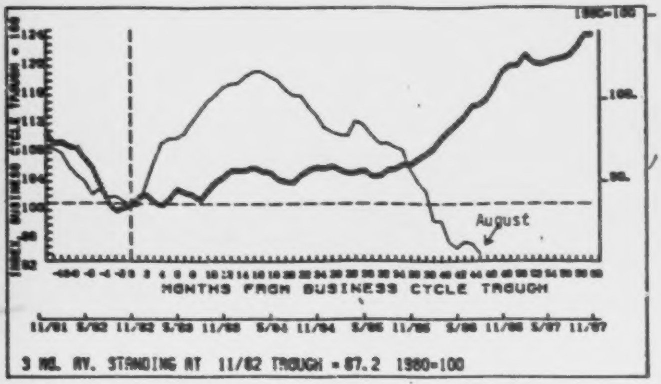


55. CONSUMER PRICE INDEX, G. R.

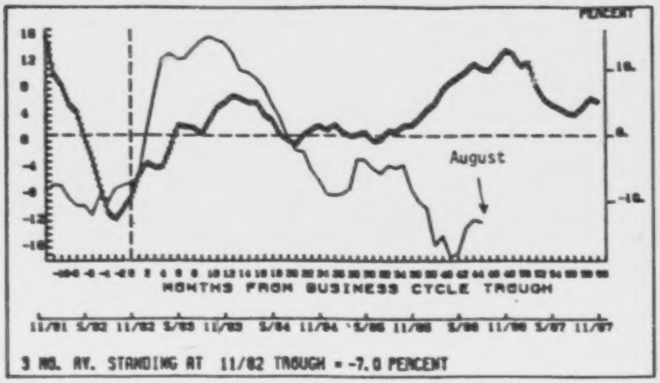


PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, cont.

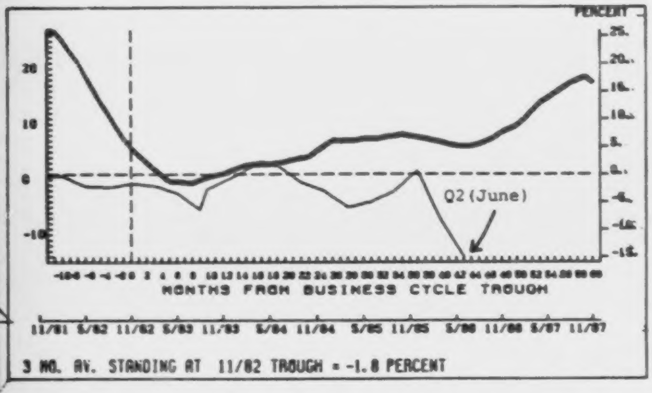
56. INDUSTRIAL MATERIALS PRICE INDEX



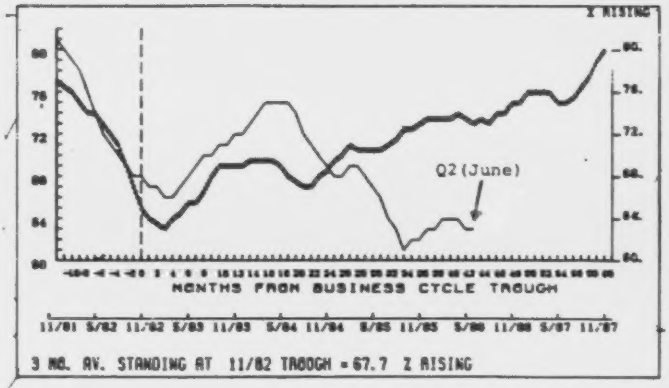
57. INDUS. MATERIALS PRICE INDEX, G. R.



58. IMPORT PRICE INDEX, G. R.

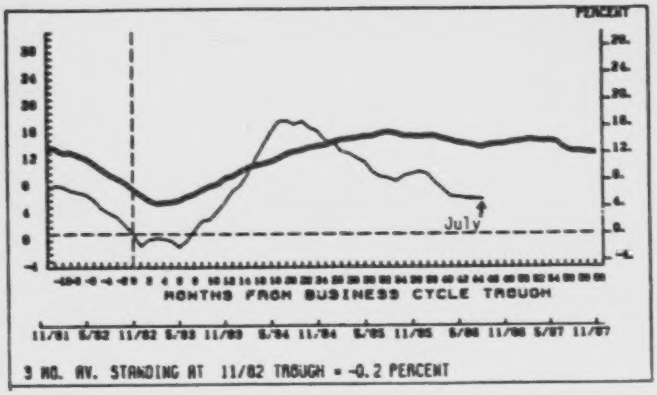


59. BUSINESSMEN'S ANTICPATED SELLING PRICES (SURVEY)

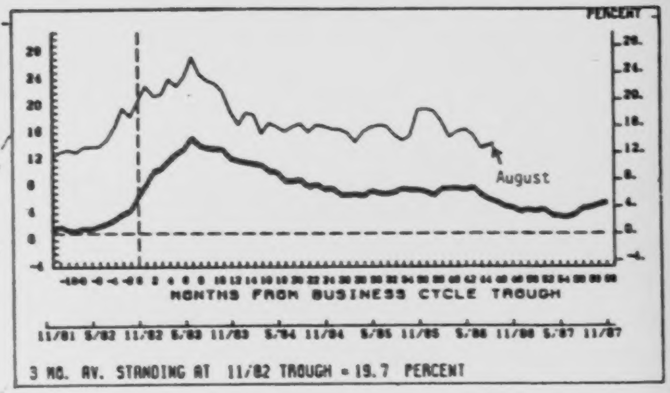


MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

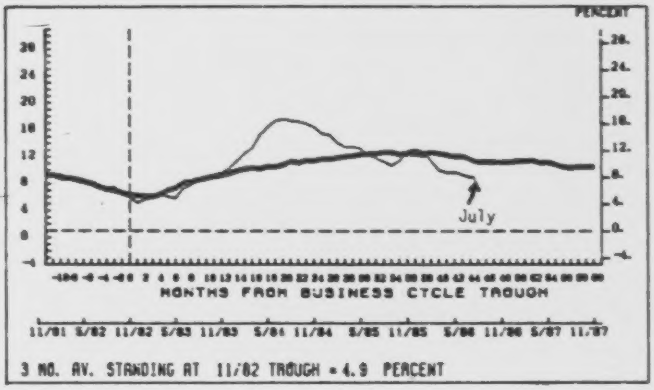
60. BUSINESS & CONSUMER DEBT, G. R.



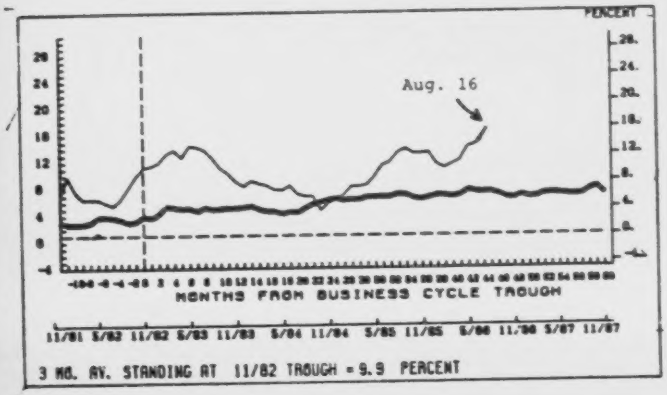
61. FEDERAL DEBT, G. R.



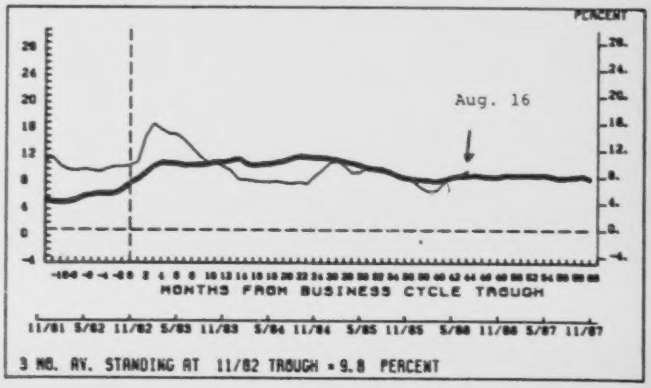
62. TOTAL DEBT, G. R.



63. MONEY SUPPLY (M1), G. R.

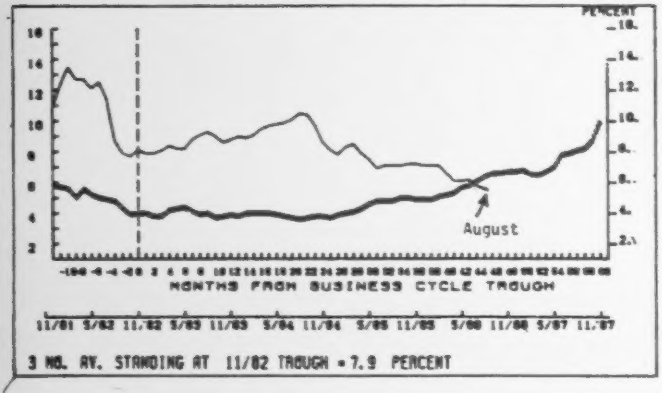


64. MONEY SUPPLY (M2), G. R.



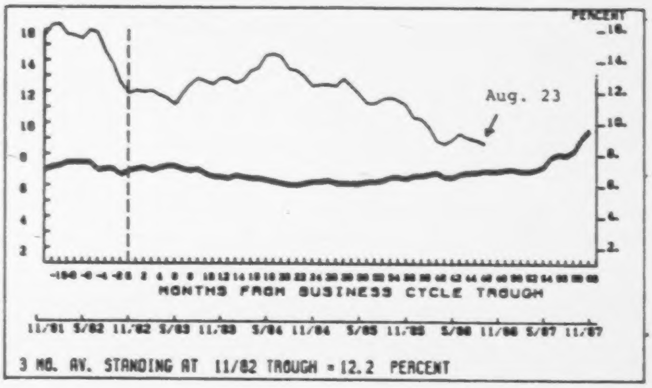
MONEY CREDIT, INTEREST RATES AND STOCK PRICES, cont.

65. TREASURY BILL RATE (3-MONTH)



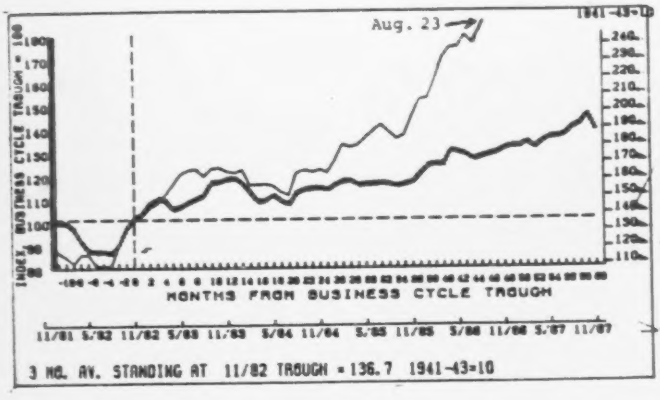
3 MO. AV. STANDING AT 11/82 TROUGH = 7.9 PERCENT

66. NEW CORPORATE BOND YIELD (AA)



3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

67. COMMON STOCK PRICE INDEX (S&P 500)



3 MO. AV. STANDING AT 11/82 TROUGH = 136.7 1941-43=10

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The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1986 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 8, No. 5
October 1986

Summary

Real GNP growth reached 3.3% at annual rate during the first three quarters of 1986, according to the Center's calculation, which employs a different measure of the real value of the trade deficit from that used by the Department of Commerce. This is a bit above the long term trend growth rate, and a good place for an expansion to be as it passes the four-year mark. A new leading indicator that we call capitalized profits shows a substantial gain during the current recovery compared with the two earlier long-lasting recoveries, virtually duplicating the gain in stock prices. The weakness in industrial materials prices that has prevailed since mid-1984 is no longer as widespread as it was, according to a new diffusion index. This shows that about half of these sensitive prices are rising, which often has been an early sign of renewed inflation.

Real GNP Growth Reaches 3%

As the economy begins running for its second four-year term, having rounded out the first 48 months in November 1986, it can claim that real growth has reached the long-term trend rate of 3%. This is not the Commerce Department's estimate of the third-quarter growth rate in real GNP -- that was only 2.4%. That estimate deflates away the real benefit we derive from an improvement in our terms of trade -- lower import prices relative to export prices. This removed 67.1 billion 1982 dollars (annual rate) from the third quarter real GNP. The effect in the second quarter was 60.7 billion. Putting this back into real GNP, the Center's calculation yields a third-quarter growth rate of 3.1% (see Table A).

Taking the first three-quarters of 1986 together, the growth rate in real GNP by our method is 3.3%, compared with the

TABLE A.

ALTERNATIVE MEASURES OF OUTPUT, NET EXPORTS AND PRICES

	Levels					Percent Changes, Annual Rate				
	III/85	IV/85	I/86	II/86	III/86	II/85 -III/85	III/85 -IV/85	IV/85 -I/86	I/86 -II/86	II/86 -III/86
In Current Dollars (billions)										
1. Total GNP	4030.5	4087.7	4149.2	4175.6	4234.3	6.8	5.8	6.2	2.6	5.7
2. Net exports	-83.7	-105.3	-93.7	-104.5	-110.1	-	-	-	-	-
3. Gross domestic purchases (1-2)	4114.2	4193.0	4242.9	4280.1	4344.4	7.3	7.9	4.8	3.6	6.1
In 1982 Dollars										
4. Total GNP, official	3603.8	3622.3	3655.9	3661.4	3683.3	4.1	2.1	3.8	0.6	2.4
5. Net exports, official	-113.8	-132.0	-125.9	-153.9	-164.6	-	-	-	-	-
6. Gross domestic purchases (4-5)	3717.6	3754.3	3781.8	3815.3	3847.9	4.6	4.0	3.0	3.6	3.5
7. Net exports, CIBCR (2÷10)	-75.6	-94.3	-83.5	-93.2	-97.5	-	-	-	-	-
8. Total GNP, CIBCR (6+7)	3642.0	3660.0	3698.3	3722.1	3750.4	4.1	2.0	4.3	2.6	3.1
Implicit Price Deflator (1982=100)										
9. Total GNP, official (1÷4)	111.84	112.85	113.49	114.04	114.96	2.5	3.7	2.3	2.0	3.3
10. Total GNP, CIBCR (3÷6)	110.67	111.69	112.19	112.18	112.90	2.6	3.7	1.8	0.0	2.6

Commerce Department's 2.3%. Hence we are back in the trend ballpark (stadium?) if we admit the real benefit from the shift in the terms of trade.

It may be of interest to note that while the U.S. government has not yet accepted this idea in the GNP calculation, the Japanese government has already gone one step farther. They use an index of their terms of trade in their leading economic index! We are planning to look into this. Anything that is worth $67 billion is worth looking into!

A New Leading Indicator: Capitalized Profits

It has long been recognized that profits and interest rates are important factors in the business cycle, as well as in the stock market. Both factors influence capital investment by business firms, and hence affect employment and income. Since rising profits generally favor investment while rising interest rates generally deter investment, these opposing influences can be unified by capitalizing profits. This means calculating the capital sum that would, at the current rate of interest, generate a continuing flow of income equal to the current level of profits. We calculate it simply by dividing profits by corporate bond yields expressed in decimals. Capitalized profits then tend to rise when profits go up or bond yields go down, and vice versa.

We find that capitalized profits are a leading indicator of business cycles, exhibiting longer leads than ordinary profits. As a business expansion gets older, profits usually rise less rapidly but bond yields rise more rapidly, so that capitalized profits move down. During a recession profits usually decline sharply at first but then less sharply, while bond yields often rise for a time but then drop rapidly. So capitalized profits fall initially but then begin to rise before the recession has ended and before ordinary profits begin to recover.

Although this scenario is a reasonably accurate description of what goes on in the typical business cycle, there are exceptions to the rule. In some brief and mild recessions when ordinary profits declined, capitalized profits did not, because the decline in bond yields was sufficiently large to prevent it. This kind of development, encouraging to investors, may be one of the reasons why these recessions remained brief and mild. In any event, capitalized profits do not lead the business cycle with unfailing consistency. At the sixteen cycle peaks and troughs between 1948 and 1982 capitalized profits led eight times, coincided once, and missed seven of the turns. The leads when they did occur were relatively long -- the median is nine months.

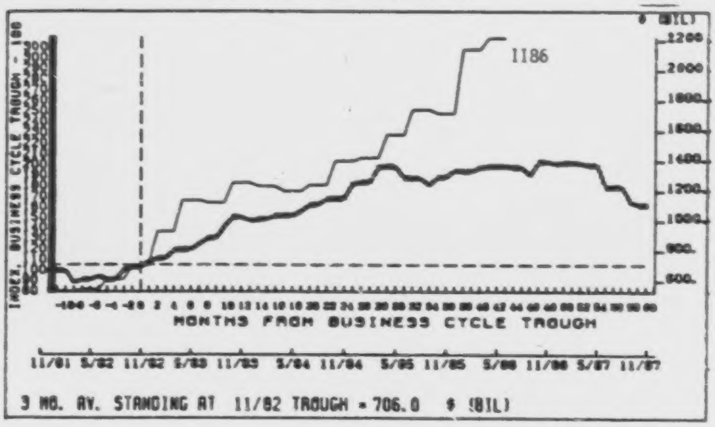
Another interesting characteristic of capitalized profits is that the turning points correspond fairly closely with those in stock prices (S&P 500). More often than not, they lead stock price turns. The median lead is two months. However, stock price cycles have sometimes occurred without a corresponding cycle in capitalized profits. In short, the relationship is far from perfect, but capitalized profits do seem to be one of the factors that explains the tendency for stock prices to lead the business cycle.

They may also help to explain why some bull markets are bigger than others. Chart A shows how far the current recovery in capitalized profits since 1982 has exceeded the two previous long upswings, and how that divergence has been mirrored in stock prices. According to this picture, the bull market has had a solid base.

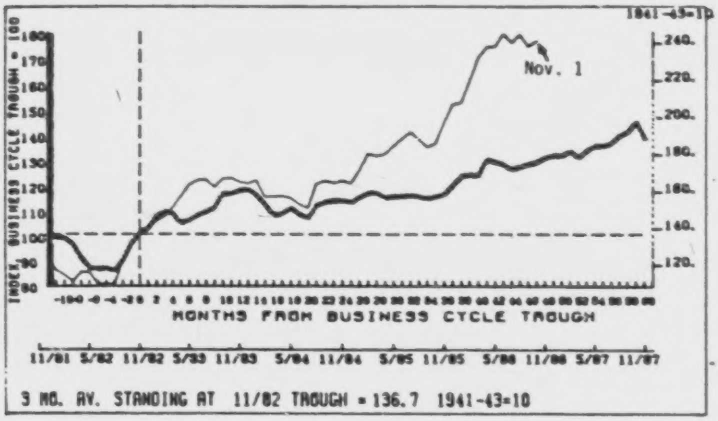
CHART A.

RECOVERY PATTERNS: CAPITALIZED PROFITS AND STOCK PRICES

CAPITALIZED PROFITS*



COMMON STOCK PRICE INDEX (S&P 500)



*Corporate profits after taxes with IVA and CCA, divided by Corporate Bond Yields (new issues, high grade).

A word must be said about the concept of profits used in this analysis. The figures are those developed by the Department of Commerce for its national income and product accounts, with inventory valuation adjustments and capital consumption adjustments. That is, reported profits are adjusted so that inventories are valued consistently and depreciation is estimated consistently. In recent years, with violent movements in inflation and substantial changes in tax rules for depreciation, these adjustments make a big difference. Without them, profits look much weaker. Evidently the market itself has made allowances for this and has reacted appropriately.

The Widening Scope of Commodity Price Increases: A New Measure

Inflation is usually defined as a general, continuing increase in the level of prices. The word "general" is important. Price increases in just a few products or services are not enough. They can be offset by declines in other prices. Sometimes a big increase in the price of a single product, such as oil, may spread widely and create inflation, but it is the widespread and continuing effect that constitutes the problem. It is therefore important to have some measures of how widespread price increases are. Such measures are called diffusion indexes. They tell us what percentage of a group of prices are going up.

A new measure of this kind has been developed by the CIBCR from the 18 commodity prices included in the new Journal of Commerce daily index of industrial materials prices.* These are sensitive prices, selected because of their demonstrated capacity to anticipate inflation. Hence when this group of prices begins to register widespread increases, it can be an early warning that an inflationary trend is likely to develop. The record shows that the diffusion index has led every substantial rise in the rate of inflation in the consumer price index since 1948 (Chart B). When it has risen from its low point (generally 20% or below) and headed toward 50%, the inflation rate has usually begun to move upward. The lead intervals have varied widely, however, and occasionally there have been false signals. In 1983, for example, the diffusion index climbed steadily and sharply, but there was only a small advance in the CPI rate during 1984.

Lately, the diffusion index has been climbing again, rising from 17% in December 1985 to 56% in August and 50% in September 1986. Upward pressures in commodity markets have not become widespread, but the weakness that prevailed since mid-1984 is no longer there. We are looking, then, at one possible source of a rising inflation rate in 1987.

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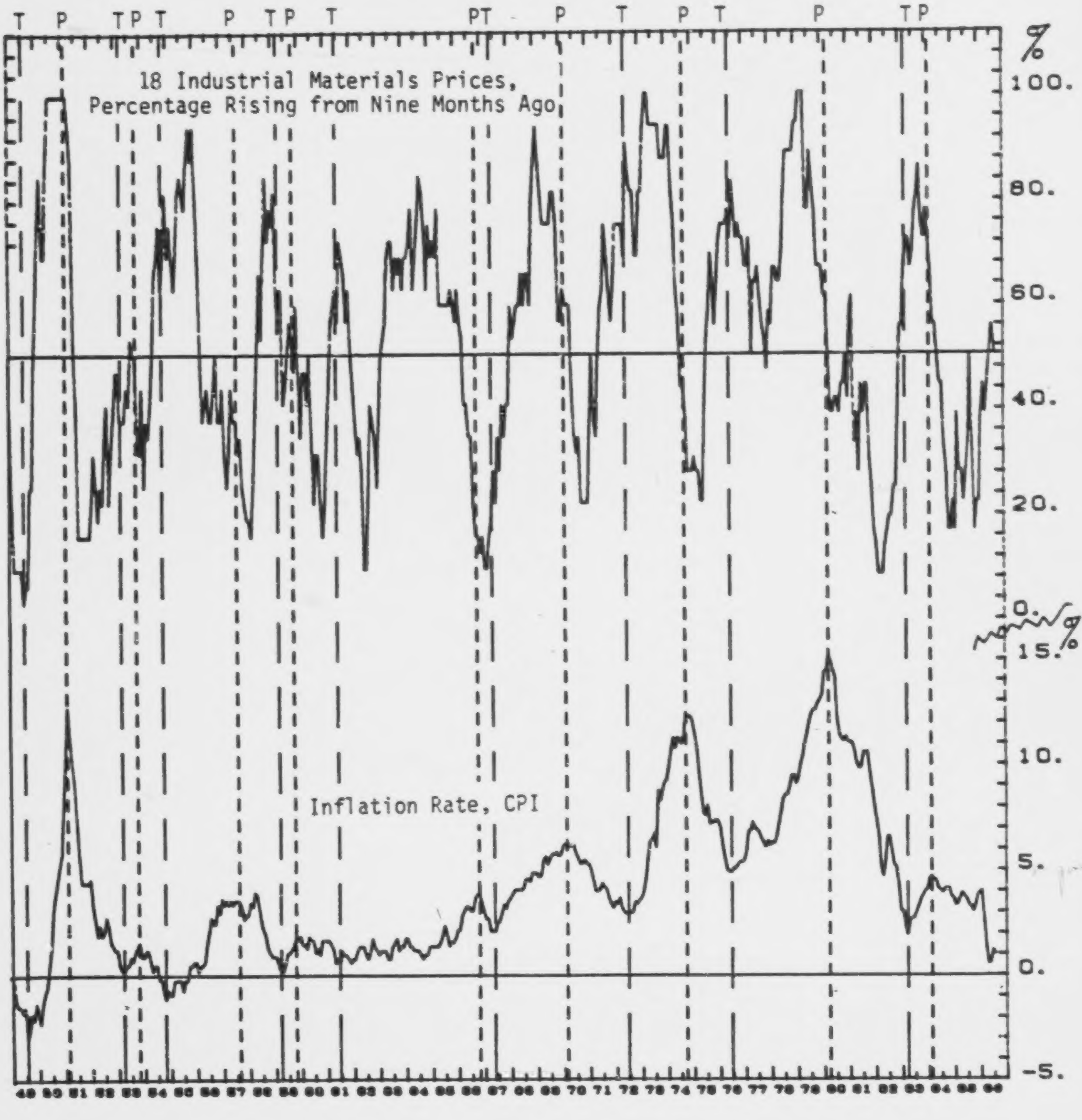
*The support of James Grant, editor of Grant's Interest Rate Observer, is gratefully acknowledged.

CHART B.

MATERIALS PRICE DIFFUSION INDEX AND THE RATE OF INFLATION



Note: Vertical lines are peaks (P) and troughs (T) in the Consumer Price Inflation Rate.

Source: Journal of Commerce Index of Industrial Materials Prices, and Bureau of Labor Statistics Consumer Price Index.

RECESSION-RECOVERY SERIES AND CHARTS

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1A N.A.P.M. Leading Index 14
2 Leading Employment Index (CIBCR) 14
3 Coincident Employment Index (CIBCR) 14
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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to analyze the indicators from three viewpoints: the current expansion, two very long expansions since 1961, and the average of the two very long expansions. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded from the averages covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

The figures show the most recent position of the indicator compared with its position the same number of months after the start of each of the previous expansions. That is, if the latest figure is for, say, November 1985, which is 36 months after the November 1982 business cycle trough, all the entries for that indicator will be for 36 months after the troughs of previous cycles.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business cycle troughs standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

The tables pinpoint the most recent month available for each indicator, and compare it with the corresponding point in each of the previous expansions.

A more comprehensive set of tables, the 1986 Supplement, has also been constructed by the Center. It includes sixty-three indicators and covers each month of the three long expansions since 1948, starting 11 months before the trough and ending five years after the trough. The average recovery is also shown for each month of the six-year span. Hence, one can use the figures to construct charts, to update comparisons month by month, to analyze changes during the later years of expansion, or to compare forecasts for the current expansion with what happened in previous expansions.

To order the 100-page 1986 Supplement, send in the order form on the back cover.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 47 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

	UNIT	Months After Business Cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Average (1961, 1975)	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes							
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	47	5.3	5.0	5.1	11.8	OCT
6A. N.A.P.M. INDEX, GROWTH RATE	%	47	10.7	5.6	8.1	5.5	OCT
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	%	46	6.3	3.4	4.8	4.5	SEPT
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	46	7.4	7.6	7.5	2.6	SEPT
9. LEADING INDEX, GROWTH RATE.	%	46	7.5	2.4	4.9	5.0	SEPT
10. COINCIDENT INDEX, GROWTH RATE	%	46	9.5	6.9	8.2	1.4	SEPT
11. DIFFUSION INDEX OF LEADING INDICATORS	% RISING	46	77.0	52.0	64.5	62.0	SEPT
13. RATIO, COINCIDENT TO LAGGING INDEX	1967=100	46	98.8	125.3	112.0	125.1	SEPT
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	44	2.2	9.2	5.7	5.4	JULY
II. Output, Income and Sales							
17. REAL GNP GROWTH RATE	%	15Q	3.5	6.0	4.7	2.1	Q3
III. Employment and Unemployment							
23. EMPLOYMENT TO POPULATION RATIO	%	46	56.4	60.3	58.3	61.1	SEPT
28. EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	46	82.6	78.2	80.4	47.8	SEPT
29. UNEMPL. SEVERITY INDEX	WEEKS PER 100 IN LABOR FORCE	46	61.0	64.4	62.7	107.6	SEPT
30. UNEMPLOYMENT RATE: TOTAL	%	46	4.8	5.8	5.3	6.9	SEPT
31. UNEMPLOYMENT RATE: INSURED	%	46	3.4	3.1	3.2	2.9	SEPT
33. SHORT-DURATION UNEMPLOYMENT RATE	%	46	3.6	4.5	4.0	5.0	SEPT
34. LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	46	3.8	4.4	4.1	4.6	SEPT
35. PART-TIME EMPLOYMENT RATIO	%	46	3.0	3.8	3.4	2.5	SEPT
IV. Investment Commitments and Inventories							
42. INVENTORY/SALES RATIO TIMES 10	%	44	14.5	15.5	15.0	15.5	JULY
43. CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	44	35.4	44.2	39.8	-7.6	JULY
V. Productivity, Wages, Costs, Prices and Profits							
44. OUTPUT PER HOUR, GROWTH RATE	%	15Q	2.4	0.8	1.6	0.8	Q3
45. UNIT LABOR COSTS, GROWTH RATE	%	15Q	1.6	8.0	4.8	1.9	Q3
46. HOURLY COMPENSATION, GROWTH RATE	%	15Q	1.6	8.0	4.8	1.9	Q3
47. REAL HOURLY COMPENSATION, GROWTH RATE	%	15Q	2.8	-0.3	1.2	1.3	Q3
48. SELLING PRICE INDEX, GROWTH RATE	%	15Q	1.3	7.9	4.6	2.2	Q3
49. GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	15Q	-0.3	-0.1	-0.2	0.3	Q3
50. CORPORATE PROFIT MARGIN	%	14Q	12.5	8.5	10.5	8.4	Q2
51. PRICE/LABOR COST RATIO	1977=100	15Q	100.4	99.4	99.9	99.0	Q3
55. CONSUMER PRICE INDEX, GROWTH RATE	%	46	1.4	9.4	5.4	1.5	SEPT
57. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	47	4.8	17.8	11.3	-2.1	OCT
58. IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	46	1.8	11.2	6.5	9.9	Q3(SEPT)
59. ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	46	59.0	89.0	74.0	61.0	Q3(SEPT)
VI. Money, Credit, Interest Rates and Stock Prices							
60. BUSINESS & CONSUMER DEBT, GROWTH RATE	%	45	11.2	14.7	12.9	6.3	AUG
61. FEDERAL DEBT, GROWTH RATE	%	46	2.2	7.3	4.7	13.0	SEPT
62. TOTAL DEBT, GROWTH RATE	%	45	7.8	12.9	10.3	8.7	AUG
63. MONEY SUPPLY (M1), GROWTH RATE	%	46	5.0	7.2	6.1	15.3	SEPT
64. MONEY SUPPLY (M2), GROWTH RATE	%	46	8.4	7.9	8.1	9.7	SEPT
65. TREASURY BILL RATE (3-MONTH)	%	46	3.8	9.4	6.6	5.2	SEPT
66. NEW CORPORATE BOND YIELD (AA)	%	46	4.5	9.5	7.0	9.3	SEPT

TABLE 2

RECESSION-RECOVERY STATUS UP TO 47 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting		Average	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
		FEB. 1961	MAR. 1975	(1961, 1975)		
I. Composite Indexes						
1. BUSINESS WEEK LEADING INDEX (CIBCR)	46	26.5	29.6	28.1	37.4	OCT
1A. N.A.P.M. INDEX	47	31.9	31.4	31.7	19.1	OCT
2. LEADING EMPLOYMENT INDEX (CIBCR)	46	26.9	26.2	26.5	26.6	SEPT
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	46	24.2	37.7	31.0	31.2	SEPT
4. LEADING INDEX (BCD)	46	30.7	35.8	33.2	29.0	SEPT
5. COINCIDENT INDEX (BCD)	46	27.0	31.4	29.2	23.9	SEPT
12. LAGGING INDEX (BCD)	46	12.7	1.4	7.1	11.0	SEPT
14. EIGHT-COUNTRY LEADING INDEX (CIBCR)	44	11.9	24.2	18.0	23.6	JULY
II. Output, Income and Sales						
16. REAL GNP	15Q	19.3	20.4	19.8	16.6	Q3
18. INDUSTRIAL PRODUCTION INDEX	46	35.0	33.3	34.2	24.6	SEPT
19. REAL PERSONAL INCOME	46	19.6	18.4	19.0	14.1	SEPT
20. REAL CONSUMER EXPENDITURES	45	12.5	15.2	13.9	16.0	AUG
21. REAL RETAIL SALES	46	20.9	21.7	21.3	30.0	SEPT
III. Employment and Unemployment						
22. TOTAL EMPLOYMENT	46	6.3	14.6	10.4	10.7	SEPT
24. NONFARM EMPLOYMENT	46	11.0	16.0	13.5	13.1	SEPT
25. NONFARM EMPLOYEE-HOURS	46	11.9	15.5	13.7	13.4	SEPT
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	46	9.1	16.6	12.8	8.1	SEPT
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	46	12.1	15.7	13.9	14.9	SEPT
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	46	-37.3	-33.4	-35.3	-37.8	SEPT
36. AVERAGE WORKWEEK, MANUFACTURING	46	4.6	3.9	4.3	4.7	SEPT
37. OVERTIME HOURS, MANUFACTURING	46	61.9	50.0	56.0	52.2	SEPT
IV. INVESTMENT COMMITMENTS AND INVENTORIES						
38. NEW PRIVATE HOUSING STARTS	46	19.6	68.5	44.1	31.0	SEPT
39. NEW PRIVATE HOUSING PERMITS	46	14.6	78.3	46.5	27.3	SEPT
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	45	49.0	39.6	44.3	37.8	AUG
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	14Q	96.1	10.4	53.2	-11.0	Q2
V. Productivity, Wages, Costs, Prices and Profits						
52. LARGE BUSINESS FAILURES	46	-5.8	-14.9	-10.3	3.5	SEPT
53. LEADING INDEX OF INFLATION (CIBCR)	46	8.5	19.4	14.0	12.2	SEPT
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	46	4.7	29.7	17.2	12.2	SEPT
56. INDUSTRIAL MATERIALS PRICE INDEX	47	6.2	26.5	16.3	-3.0	OCT.
VI. Money, Credit, Interest Rates and Stock Prices						
67. STOCK PRICE INDEX (S&P 500)	46	35.4	20.3	27.9	74.3	SEPT